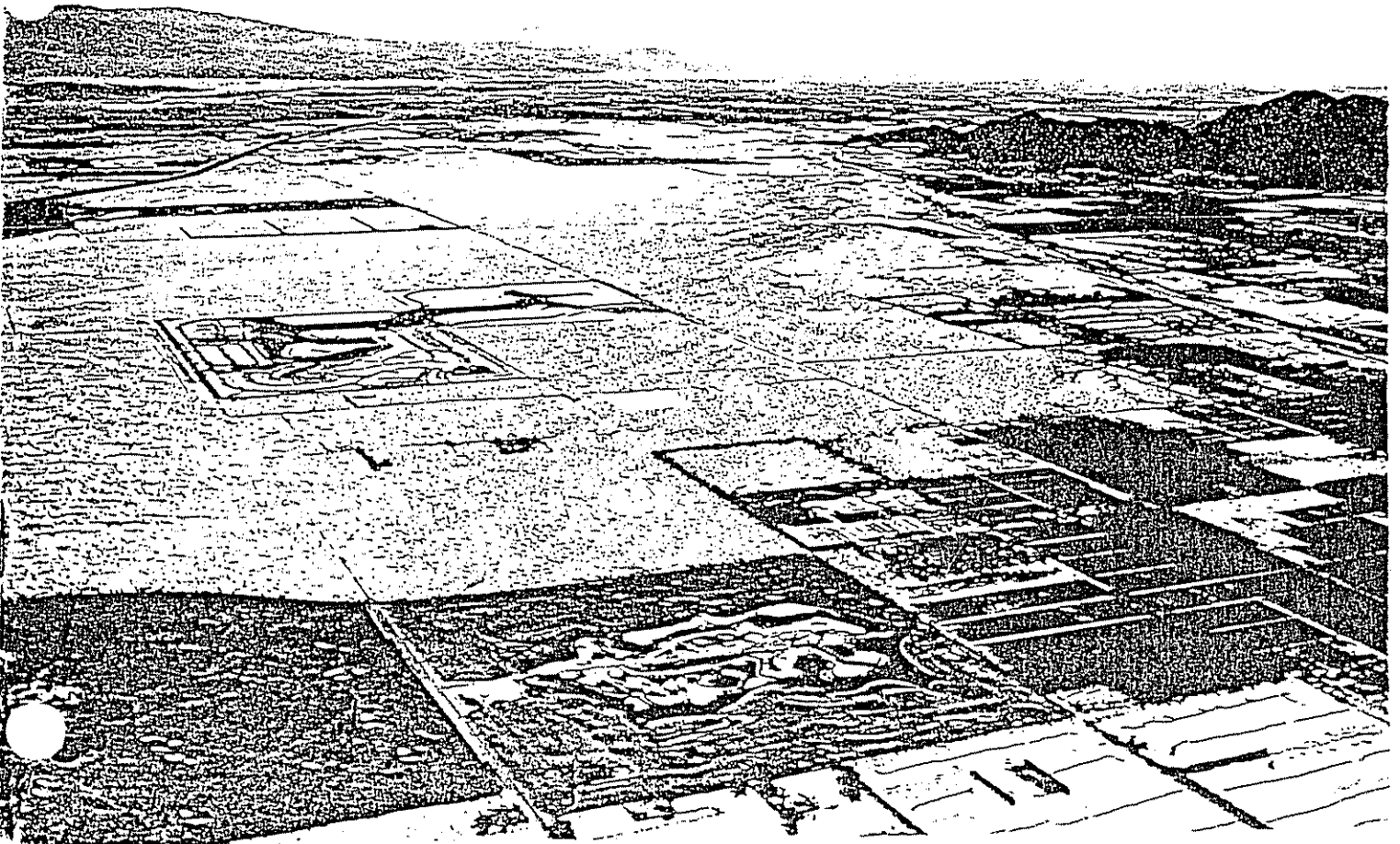
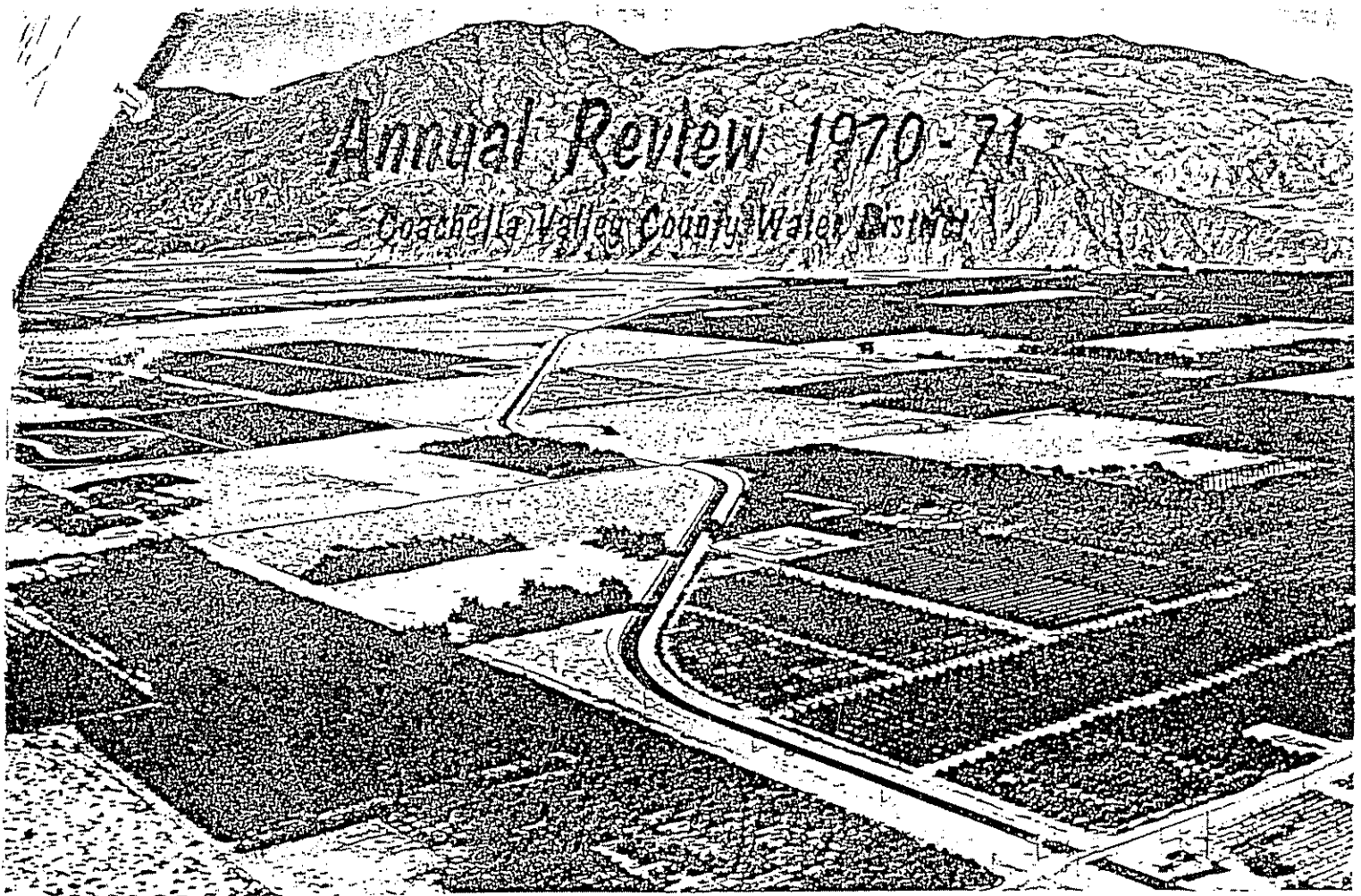
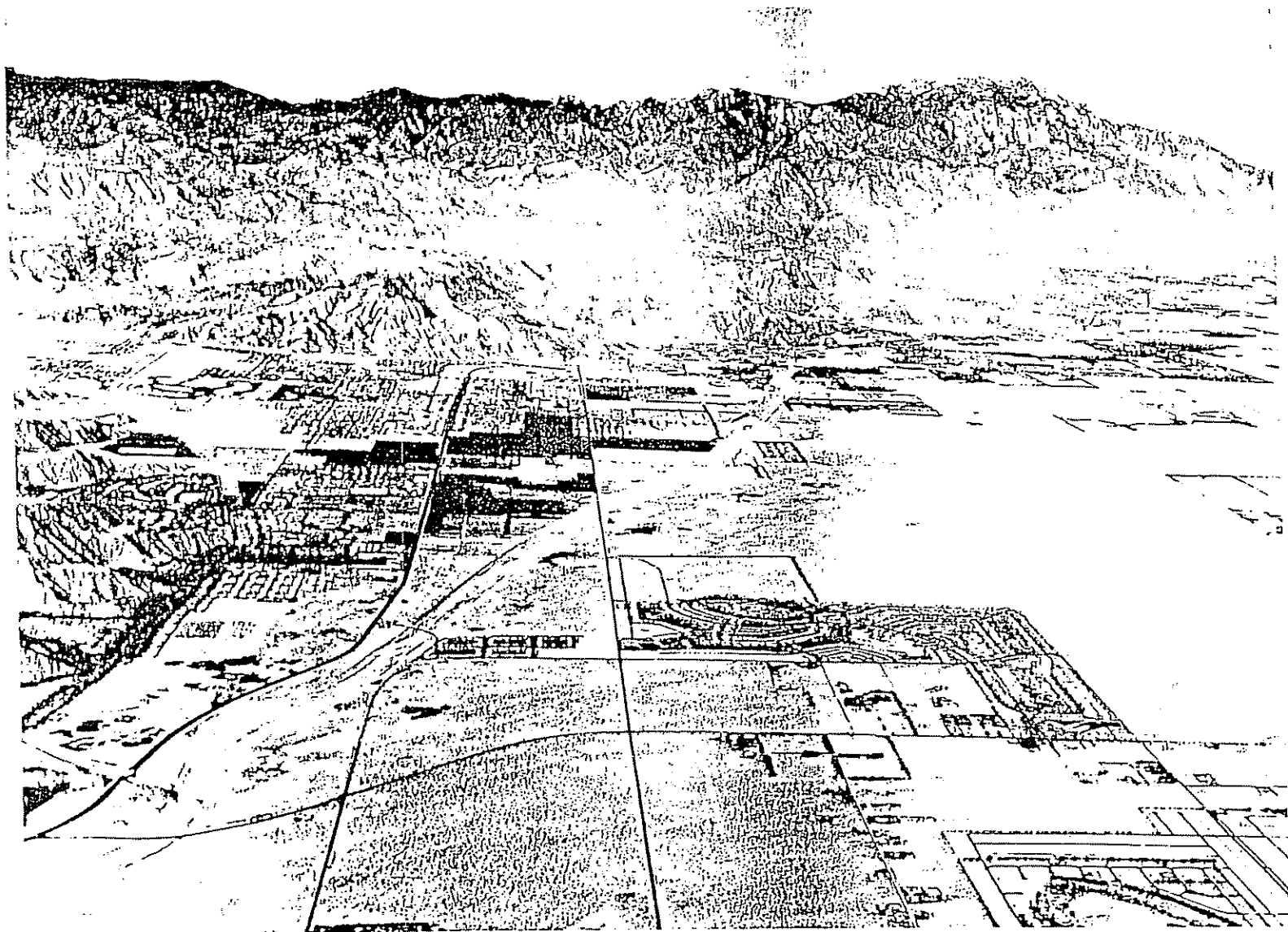


2-6





Twenty of the completed 40 miles of reconstruction of the Whitewater River Stormwater Channel, a project on which the CVCWD has been at work for 12 years, are shown in this aerial photo covering the desert floor area from Pt. Happy (lower left corner) to Palm Springs, barely visible at extreme right under Mt. San Jacinto. A contract this year at Cook Street crossing (midway in photo) erased the final stretch of the river's gorge cut by the historic 1916 flood. Rebuilding of gorge section of river, approximately 13 miles long, has cost

between \$300,000 and \$500,00 a mile. At bottom of picture is portion of Bermuda Dunes Country Club. Immediately above it is Palm Desert Country Club. At left, all fronting on CVCWD Deep Canyon flood channel, are Indian Wells, Eldorado and Palm Desert. Highway 111 winds into picture at lower left and then shoots arrow-straight through Palm Desert business section. (Rein.) complete article on Stormwater projects on pages 7, 8 and 9.)

# President's Annual Message

This brief pictorial summary of the year's busy operations of your Coachella Valley County Water District is submitted to you by the Board of Directors and staff in the sincere hope it will enable all our people to keep informed as to the scope and impact of not only the District's projects but of the extensive private development programs underway within our jurisdiction.

This valley is truly unique. The living and working conditions of our people, ranging through agriculture, retired living, recreation, tourism and commercial ventures, represent a compatible melding of many facets that have contributed toward making this region one of the real "bright spots" of California during a period regarded in many areas as somewhat economically depressed.

Requirements for service for the expanding economy have presented continued calls to your District for cooperation and assistance. I am happy and proud to report that it has been the policy of your District—and will continue to be—to provide all possible cooperation and assistance wherever and whenever this can be accomplished with prudence, good management and fairness to all residents of our District.

\* \* \* \* \*

As perhaps is generally known, the CVCWD is active in six water-related fields: irrigation water, domestic water, stormwater protection, water salvage, sanitation, farm drainage and water conservation. This is the most diversified list of services administered by any similar governmental agency of the U.S.

Significant and positive progress has been recorded in all of these fields of service during the past fiscal year covered by this report. Since most of these actions will be described by photographs and more detailed

LEON KENNEDY  
President of  
CVCWD



reports later in this booklet, I shall, in the interest of conciseness, allude only briefly to them here:

In the field of irrigation water service, more than 300,000 acre feet of Colorado River water was imported to our valley during the year. This vital flow, representing enough water to inundate the cultivated area to a depth of five feet, nourished the astonishing range of nearly 50 crops whose harvest returns released \$50 million into the economy of our valley. Needless to say the livelihood of thousands of persons is tied closely to these operations.

In fairness to the farmers who make possible this continued support of our agriculture economy it should be explained they must achieve these enviable records by overcoming tremendous odds, not the least of which is a profit pinch that enables them to retain a decreasing amount of income each year. Their determination and resourcefulness should be saluted by all. They display the rugged individualism of basic Americanism.

As for the vital stormwater protection portion of the District's portfolio, the past year proved to be a landmark period in its history. The year saw completion of a 40-mile unbroken stretch of the Whitewater River Stormwater reconstruction project—a vital program the District has been advancing for more than 12 years to provide necessary shielding of a 50-mile region of farms, cities, towns, subdivisions, recreational installations, and land holdings whose value this year exceeds a billion dollars.

Five miles of the channel work remains at the upper end of the works and this improvement will be carried out as funds make possible. Too the year witnessed the installation of a fifth drop structure on the channel's course. These serve to check the costly erosion in flood times. As still another sign of progress in this field, the Corps of Engineers is completing a channel and dike system for Chino Canyon north of Palm Springs, controlling the canyon's flow into the Whitewater.

\* \* \* \* \*

This is the tenth anniversary of the District's entry into the domestic water field. And the growth in this field of service experienced in that decade is continuing unabated, with a 15 percent expansion in the past 12 months, and a dramatic increase foreseen for the next year or 18 months. The District has successfully sought to provide an adequate and reliable urban water supply wherever feasible and readers will be interested, I am sure, to read of the numerous programs carried out in the past year.

Moreover, your District has acted energetically to be prepared to receive initial allocations of supplemental water under the State Water Plan beginning in 1973. This augmentive imported water will replenish

## OUR COVER PHOTOS

*These two aerial photos serve to underscore the diversification of services of the CVCWD. Top picture portrays the important farm irrigation work of the district, with the Coachella Canal seen winding its way through orchards and row crop lands west of Indio toward its terminus in Lake Cahuilla, located against the mountain range in the distance. Farming operations are carried out on more than 65,000 acres.*

*The bottom photo, looking eastward from near Rancho Mirage, pictures the desert floor area north of Palm Desert where projects involving more than \$30,000,000 are being completed, all to be served with domestic water and water salvage facilities provided by the CVCWD. Territory within range of the camera makes up Improvement Districts 16 (water) and 53 (sanitation). In foreground is plush Desert Island Country Club, its condominium homes rising on an island surrounded by lakes and a golf course. Diagonally across Boh Hope Drive is the \$7,500,000 Eisenhower Medical Center, and a mile to the east is located the 400-acre, 2,000-unit Palm Desert Greens, mobile home and country club installation. (Site for Palm Desert Water Salvage plant, to serve these three establishments and possibly nearby communities, is at upper right on north bank of Whitewater River Stormwater Channel.)*



*These five directors, elected from their divisions of the CVCWD, directed the tremendously diversified program of the District in six water-related fields. The District is conceded to have the broadest program of activities of any similar*

*governmental agency in the US. The directors are left to right: C. Jack Frost, Vice-President Raymond R. Rummonds, President Leon Kennedy, George Leach and Sidney D. Witherow*

*(Continued from page 3)*

the vast underground from which increasingly heavy withdrawals are being made to supply our expanding economy

In the field of domestic water the District has made sure that areas receiving the benefits defray the cost. Bond and assessment districts have been established in the case of new installations. Where existing systems have been acquired, long-range payout periods are established with the investment costs to be met from revenues.

\* \* \* \* \*

Perhaps as important and far-reaching as any project of the year has been the District's progressive work to meet the growing demand for modern water salvage facilities to displace the bothersome and costly septic tank system in use over a wide area. Actions taken in this field are regarded as forerunners of a constantly broadening service in this field in the years ahead.

The multi-community regional water salvage plant is being planned to first handle the sanitation needs of the Eisenhower Medical Center territory where projects underway are little short of amazing. Later this treatment plant may serve many communities. Your District's board of directors is gratified that again, as in the past, its personnel has been able to rise to the occasion when a need for a new service has arisen. By absorbing these new duties under the existing headquarters and personnel, and with the use of one set of equipment, much duplicating tax cost is averted. This is an economical multi-use policy.

(The CVCWD now operates a water salvage plant, its first at the Palm Desert Country Club, formerly Palm City)

\* \* \* \* \*

First major contract for development of recreational facilities at Lake Cahuilla has been carried out during the year by the County of Riverside Parks Department. This improvement will meet the fullest approval of people of the valley who, with an attendance figure of more than 40,000 for nine months without these improvements in existence, have proven their appreciation of the facilities.

The lake, serving as a terminal reservoir for the CVCWD's irrigation operations, has proven to be an indispensable reserve in operation of the irrigation system, and also has figured importantly in water conservation measures since the District has repository

for surplus supplies resulting when weather conditions alter water needs.

Farm drainage activities have continued on an upward line in the year, and the valley now has more than 2,000 miles of on-farm and lateral drainage lines through which unwanted high-saline water is diverted into the Salton Sea. Incidentally, this drainage water maintains the sea for recreational use.

On later pages in this report you will find the annual financial statement of the Auditing Department. It is my hope that each reader will closely scrutinize it and acquaint himself or herself with the year's operation. I wish at this juncture to assure every reader that your District's board and staff operate on a strict rule of utmost economy commensurate with reasonable progress. Constantly rising costs have presented a severe test of good management, and money needs have been held to absolute minimum.

\* \* \* \* \*

At this writing it seems the District will be able to replace its outmoded, over-crowded and inefficient shop and warehouse facilities during the 1971-72 fiscal year. And the construction can be carried out without the need for additional tax levies.

These buildings were erected on a temporary basis more than 25 years ago during construction of the Coachella Canal. The District's requirements have doubled and tripled in that period, and the structures have been a serious bottleneck to operations. Your Board of Directors feel that new facilities will continue to pay off in improved efficiency in the years ahead.

Revenues realized largely from the sales of tax delinquent lands—sales that put these properties back on the tax rolls to share in support of the valley's tax needs—will defray the building costs and thereby obviate added direct taxes.

My four colleagues on the Board of Directors—Vice-President Raymond R. Rummonds, and Directors Jack Frost, George Leach and Sidney D. Witherow—join me in extending to all persons within the District their sincere appreciation of the understanding of the District's needs and problems, and for their support of the forward-looking policies aimed at meeting those requirements in a way to insure continued, uninterrupted and orderly operation of the affairs of our great valley.

Yours most respectfully

*Leon Kennedy*  
LEON KENNEDY, President

# VALLEY CROPS

Growers Get Returns Of \$50  
Million From 46 Different  
Products; Grapes Top The List

Farmers and growers earned anew for the Coachella Valley the widely-famed sobriquet of "America's Garden Spot" during the past year by sending to market nearly \$50 million in crops grown on 52,276 acres.

Forty-six different main crops and varieties were produced during the year on the valley's fertile soil with all but a small acreage irrigated by waters of the Colorado River delivered by the CVCWD through the Coachella Canal. (A small percentage of the valley's farms still use well water.)

## GRAPES TAKE LEAD

Returns for grapes topped the list of crops with \$14½ million, followed by citrus which was worth slightly over \$12 million and dates third at \$6,973,342.

Vegetables, with a great variety of crops, had a total return of more than \$15 million, led by a yield of \$6 million from carrots.

Virtually all the Valley's crops were harvested during the winter months between September and June, underscoring its reputation as the winter-time fruit and salad bowl. Its products were sent throughout America and Canada and to many foreign countries across both the Atlantic and Pacific.

Returns on grapes, produced on 8,515 acres, topped the list of crop values for the year with a grand total of \$14,468,558 on all varieties.

## PERLETTE RETURN LARGEST

Perlettes, with a total of 1,286,751 lugs, led the grape varieties, yielding \$7,450,288 as against 1,116,803 lugs of Thompson Seedless worth \$5,070,286. Of the minor types the Cardinals were third, showing a total of 279,899 lugs that sold for \$1,511,455. Beauty Seedless produced \$326,552; Exotics, \$82,074; Ribiers, \$4,098; and others, \$15,685.

Citrus revenue was second in total but its acreage far exceeds that of any specific category of crops grown in the valley. The total is 18,806 with grapefruit accounting for 8,359 acres; lemons, 1,906; tangerines, 3,857; Valencias, 2,388; limes, 95; and miscellaneous, 2,451.

All citrus had a gross value of \$12,143,097 including the volume that was shipped to by-products. Grapefruit marketed was worth \$5,673,115; lemons \$1,340,917; limes \$63,907; tangerines \$1,058,201; Valencias \$782,880 and miscellaneous \$786,644.

Grapefruit by-products showed a return of \$1,760,572. Lemons accounted for \$170,477; Valencias, \$290,784; tangerines, \$93,640 and miscellaneous \$101,796.

## DATES OVER 7 MILLION

Dates scored a total of \$7,098,594 for the year. They are grown on 4,324 acres.

On 13,141 acres, the Valley's growers produced an astonishing variety of truck crops worth \$15,205,916. This tremendous assortment of vegetables went to market in 4,710,646 lugs, crates, cartons and sacks.

As has been the case in previous years, carrots, grown on 1,220 acres, had a wide lead in the truck crop division, bringing to the valley \$6,065,237. Second in value was sweet corn—the yield from

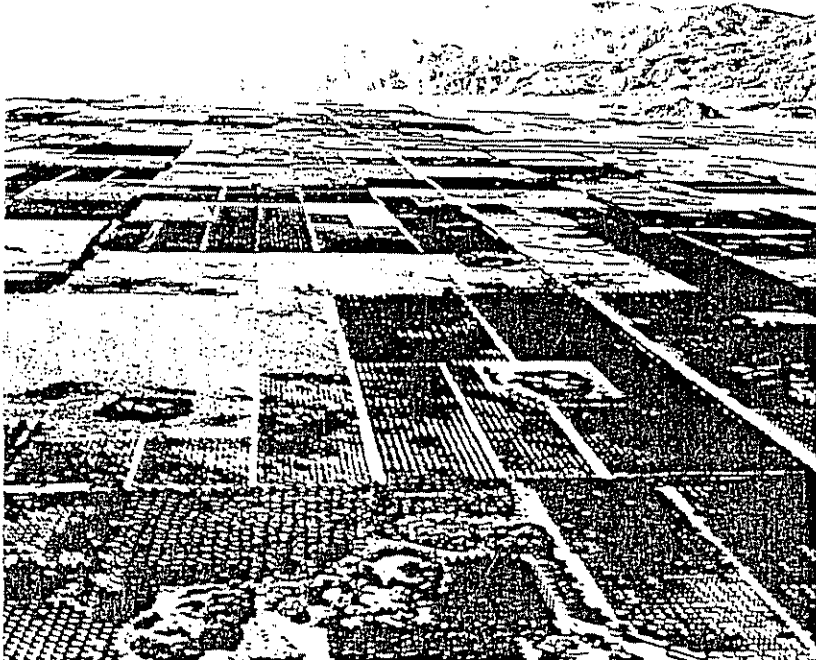
3,635 acres was worth \$2,268,822. Third place in the dollar column was taken by asparagus whose 126,800 crates, harvested from 1,585 acres, accounted for \$1,162,756.

## IN GREAT VARIETY

Other large volumes were: beans \$245,000; cabbage \$297,273; egg plant \$359,902; okra \$338,436; onions, dry

\$140,540; and green \$774,497; bell pepper, \$656,901; and chili peppers \$134,727; radishes \$528,840; romaine \$240,490; summer squash, \$218,970; zucchini squash \$172,133. Tomatoes, once a leading producer in this area, had the very small production of 11,662 lugs worth \$23,324.

(Please turn to page 17)



At top, latest mechanization of farm work in the Coachella Valley is shown. It is a corn harvester in operation, replacing the hand work of dozens of men. Below is a checker-board portion of the fertile farmlands that cover more than 62,000 acres of the Valley. The camera here looks due south from a point northwest of Indio.



## *Irrigation Delivery Percentage Mark Hits Highest Point in 1971*

During 1970 the CVCWD delivered to farms of the valley 95.2 percent of its water diverted from the Colorado River, this total representing the highest mark ever scored by the District since the river flow first reached this area in 1949 via Coachella Canal.

The losses of 4.8 percent were accounted for chiefly in evaporation and seepage in the 76-mile distance the water flows under the CVCWD control. Consistently through the years the Water District here has scored highest in percentage of deliveries among the larger irrigation districts of the West despite the long haul necessary to import the vital flow.

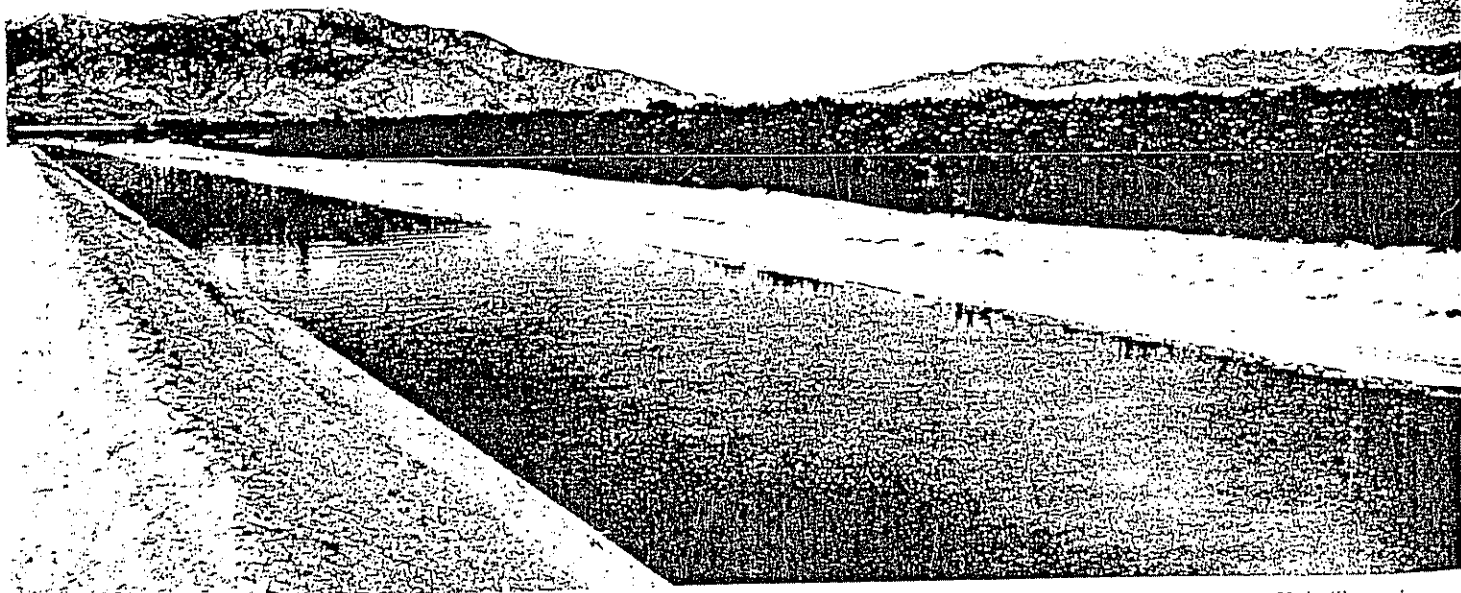
### **AT IMPERIAL DAM**

Irrigation water destined for the Coachella Valley is diverted from the river at Imperial Dam, 18 miles north of Yuma.

It flows in the main All-American canal to the turnout point east of Holtville. At this location the water is 123½ miles from the terminus here.

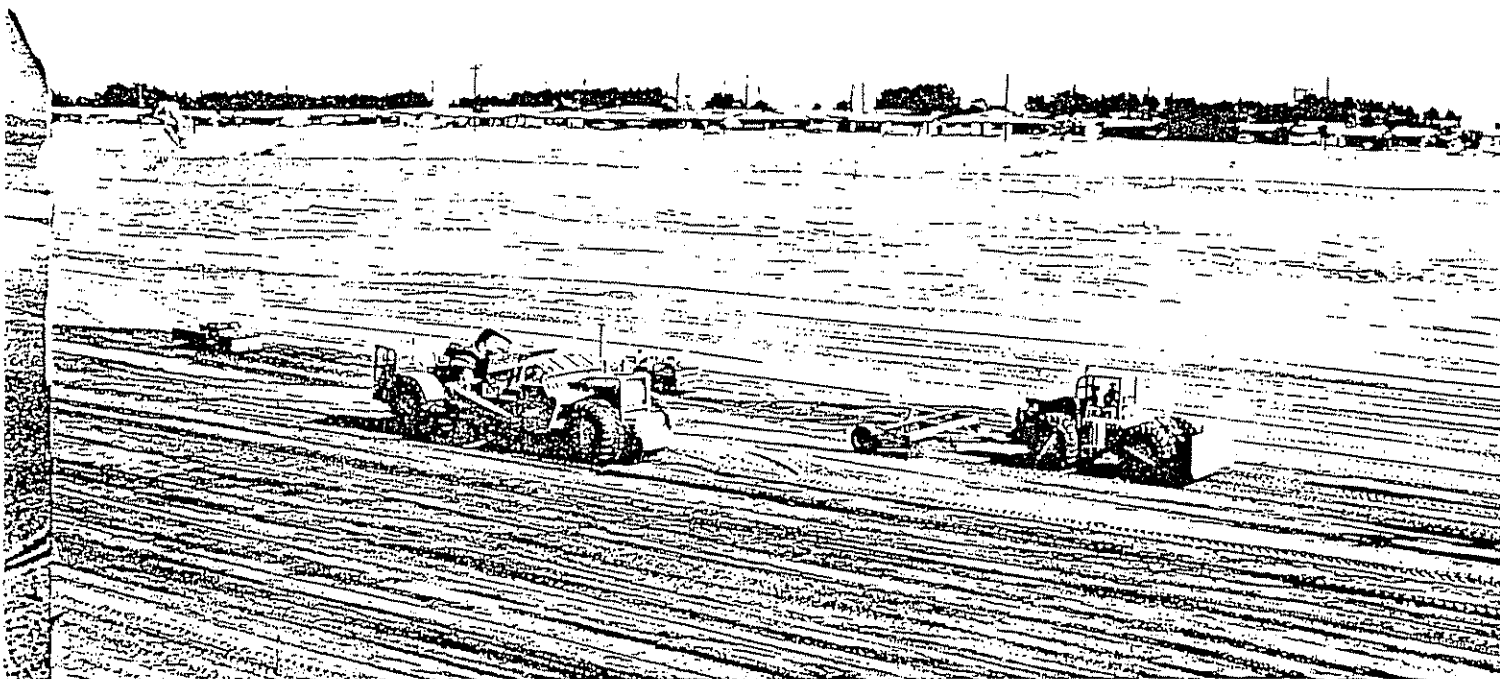
For the first 47 miles of the Coachella Canal distance the water is under control of the Imperial Irrigation District which furnishes water to the area within its territory northward to Niland.

At point 6-A on the canal, 76 miles away from the canal's end here, the CVCWD takes over management of its share of water. The first 38 miles of this distance is open, unlined canal, while the latter half is cement-lined.



The spectacular All-American Canal system through which priceless Colorado River water is delivered to the Coachella Valley is pictured in these photos. In top scene the Coachella Canal turns out at this point, 40 miles below the Imperial Dam diversion works, to begin its 123½ mile journey across the desert to our valley. Canal is shown exiting from left side of center of

picture. In foreground is the highway between Holtville and Yuma. All-American canal flows westward out of bottom of photo, carrying water to irrigate 450,000 acres in Imperial Valley. In photo at bottom of page the Coachella Canal flows past a citrus grove northwest of Indio while snow-capped San Jacinto Peak, at left, and San Geronimo at right, provide a winter-time background.



During the summer of 1971, a CVCWD contract realigned, deepened and widened the final 12,150 feet of the deep gorge cut in the Whitewater River course by the historic flood of 1916. Here in top photo, heavy equipment puts finishing touches on the channel which is close to 30 feet deep just west of Cook Street. Picture at bottom of page gives some idea of the size of the

500-foot wide channel as it begins wide curve a quarter of a mile west of Cook Street. Project also covered installation of the fifth drop structure in the river's course, all five serving to check the serious erosion sustained in each flood. Channel has been under reconstruction by the CVCWD.

## STORMWATER WORKS

Contract Erases Final Gorge Stretch And Completes 40 Miles of Whitewater Storm Channel

The CVCWD this year realized a goal toward which it has been striving industriously for more than 10 years—the realigning and widening of the final portion of the 13 mile deep-cut section of the Whitewater stormwater channel between Thunderbird Country Club and Point Happy.

Under a private contract let by the District, a contractor rebuilt the final 12,150-foot segment of the job east and west of Cook Street north of Palm Desert where some of the heaviest movement of soil in the entire project was experienced.

Not only did the contract signal completion of the last gorge area work but it also linked up previously finished

work east and west of that point to provide 40 miles of continuous modern-standards channel between a point east of Palm Springs and the Salton Sea.

### FIVE MILES REMAIN

Five miles of the channel reconstruction remain to be finished in the open-wash region northeast of Palm Springs before the entire project, begun back in the 'fifties, can be given the stamp of completion. The rebuilt portion of the storm course now ends one mile north of Ramon Road. Right-of-way problems in the remaining five-mile stretch are rapidly being cleared up, opening up the way for the concluding construction in the years immediately ahead.

The Cook Street contract had an added important feature—it included the building of the fifth drop-structure installed to check flood-period erosion. Set in the channel a quarter of a mile below the Avenue 44 crossing, the big cement and rock spillway is the first erected by the District under its own contract. The other four were inserted in the river's course under contracts let by the U.S. Corps of Engineers which spent five million dollars repairing damage inflicted by five major floods that buffeted the storm channel between 1965 and 1969.

Stormwater engineers of both the CVCWD and Corps believe that installa-

(Continued on next page)





## STORMWATER (Continued)

tion of these check points at close intervals will be required before the serious erosion suffered in floodings can be checked. At least one a mile is recommended in some sections.

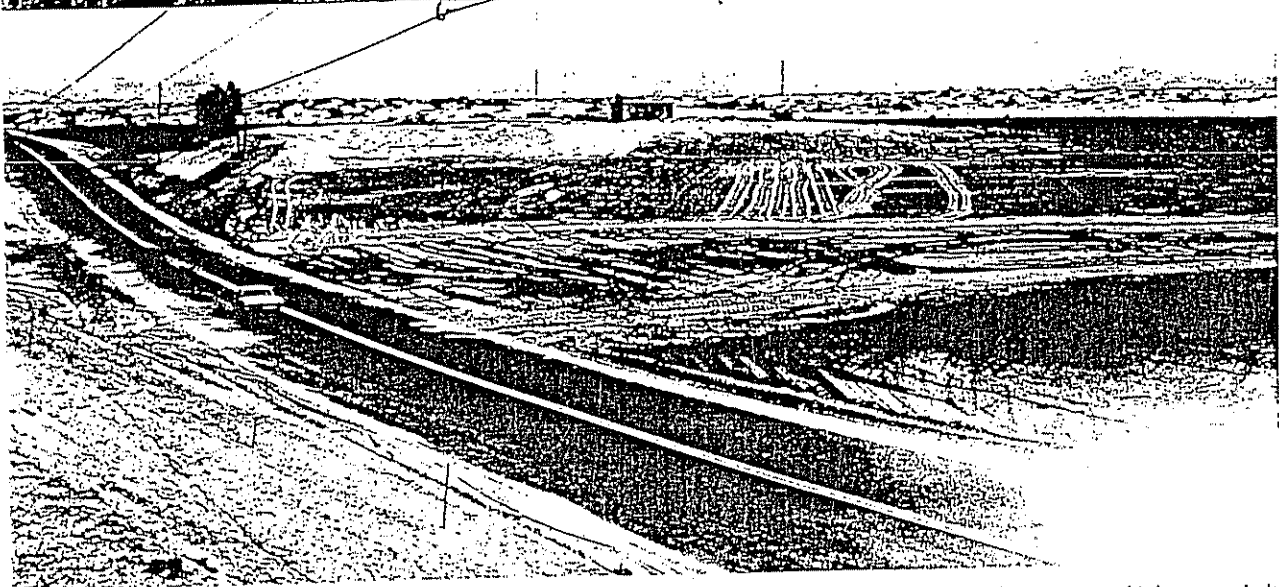
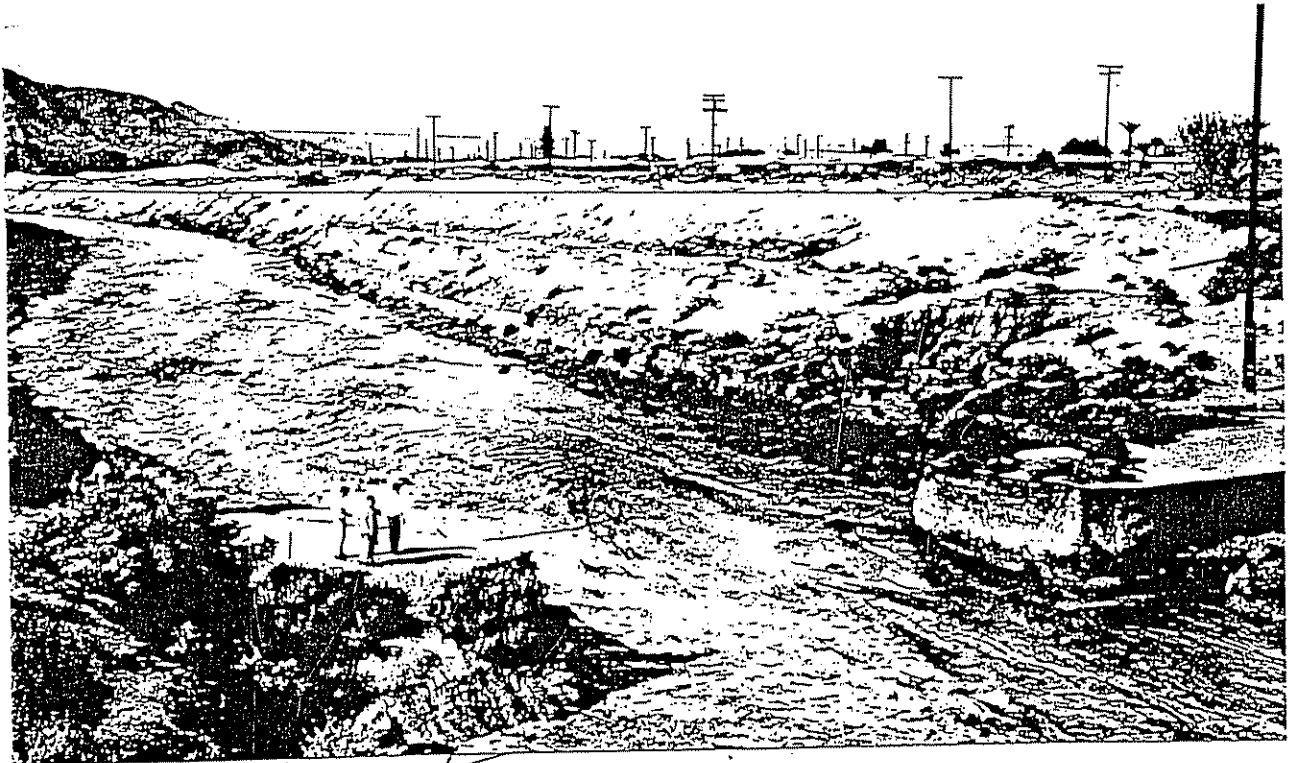
The drop in the elevation between Palm Springs and the Salton Sea has

been shown to be 22 times greater than the slope of the Mississippi River—and these desert flood waters wash through a loose sandy soil. Sections of the channel planted to grass have resisted the erosion.

The original test drop structure was built by the Corps of Engineers at Paxton Road just south of Thunderbird

Country Club. Though badly battered by the three floods of 1969, the spillway was not washed out and this encouraged the storm engineers to install others near Monroe Street below Avenue 44 southeast of Indio and below the Thermal crossing of Highway 111.

(Continued on next page)



The "before and after" photos of the Cook Street crossing of the Whitewater River Stormwater Channel northeast of Palm Desert. At top flood waters, flowing in the narrow original channel, are washing out the raised county highway that spanned the river course. The street was washed out five times between 1965 and 1969. Below is the crossing as completed in the channel reconstruction program of 1971.

now widened to 500 feet and with the county highway asphalt roadway at grade level. In future floods the paving will be covered early with silt from the floodwaters and can be put back into service quickly by scrapers when the flood waters recede. This grade level plan was not feasible in the old crossing as the dip was too sharp and sight distances short had the roadway been at the bottom of the stream bed.



Fifth drop structure along the Whitewater River Stormwater Channel is pictured above as it was completed a quarter of a mile east of the Ave. 44 crossing. The streambed level was raised to a depth of 15 feet for a long distance west of this point to level out the channel and slow the flood waters, thereby reducing erosion. This was the first of these to be built under a CVCWD contract, the other four were installed under repair contracts let by the U.S. Corps of Engineers

### (Stormwater, Continued) Whitewater River Gorge Gouged Out Deeply By Historic Flood of 1916

(Continued from page 8)

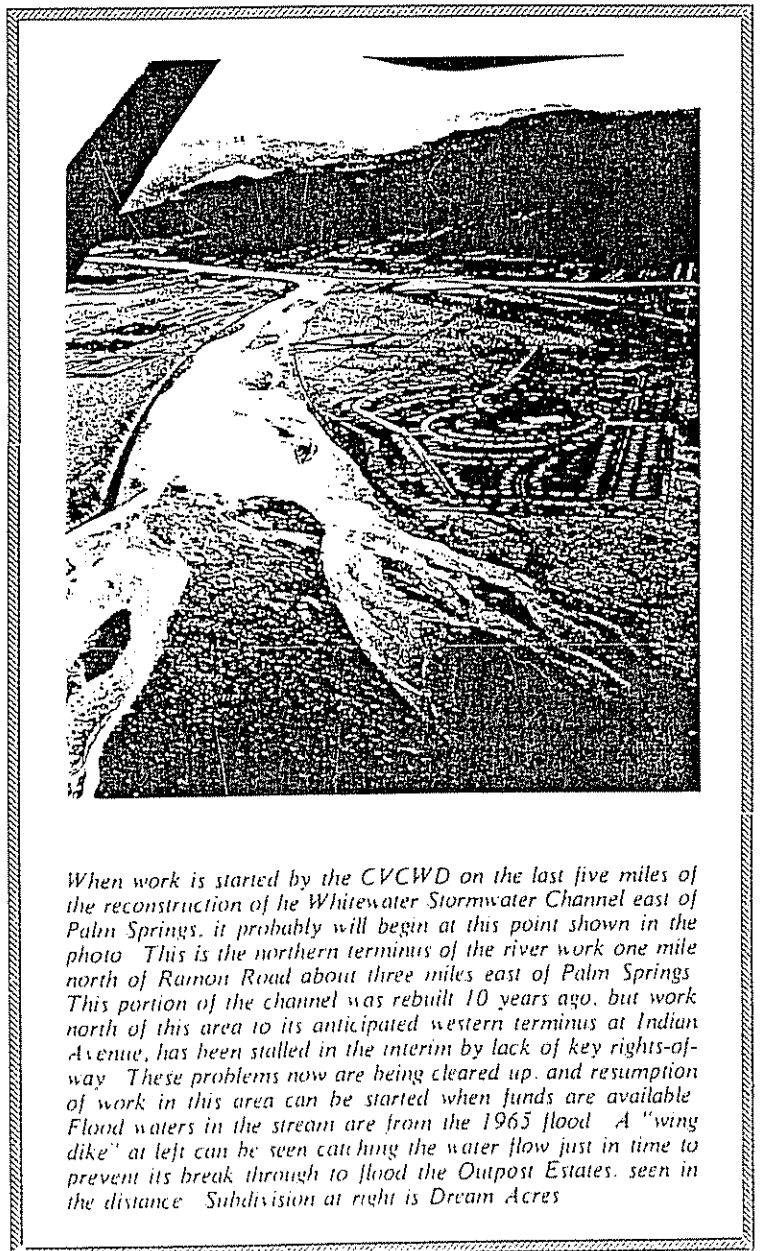
In reconstructing the portion of the river course where the gorge existed, the CVCWD was undoing damage inflicted by what is regarded as the "granddaddy" of floods in this century—the inundation of January 1916.

In that year, the Whitewater River, which had flowed directly eastward toward Indio for untold centuries before swerved its course southward past Palm Springs and gouged out a canyon past present day sites of Rancho Mirage, Palm Desert and Indian Wells.

At one point near the present site of Rancho Mirage where the deep cut actually began, land owners who had known of a slight defile across their lands prior to the storm, looked out upon a yawning chasm 500 feet wide and 50 feet deep when the waters receded.

This deep slash in the earth's surface extended to Point Happy north of La Quinta where the 1916 flood waters

(Please turn to page 22)



When work is started by the CVCWD on the last five miles of the reconstruction of the Whitewater Stormwater Channel east of Palm Springs, it probably will begin at this point shown in the photo. This is the northern terminus of the river work one mile north of Ramon Road about three miles east of Palm Springs. This portion of the channel was rebuilt 10 years ago, but work north of this area to its anticipated western terminus at Indian Avenue, has been stalled in the interim by lack of key rights-of-way. These problems now are being cleared up, and resumption of work in this area can be started when funds are available. Flood waters in the stream are from the 1965 flood. A "wing dike" at left can be seen catching the water flow just in time to prevent its break through to flood the Outpost Estates, seen in the distance. Subdivision at right is Dream Acres.

# War On Salt

B of R Begins Drive  
To Keep Immense Load  
Of Salt From River

For the past 20 years the salt content in waters of the Colorado River diverted to the Coachella Valley for irrigation has been rising steadily.

Today the mark varies between 850 and 900 parts per million at Imperial Dam, diversion point for both Coachella and Imperial Valleys. In 1951 the level of salt stood at a point just above 700.

And water experts have warned that unless counter measures are taken to hold down the salt increase, the pollution figure will rise to 1,340 by the end of this century.

## COST IS HIGH

Presence of the salt in the irrigation water has cost growers of this valley millions of dollars. Vast grids of drain lines, now totaling more than 2,000 miles in length have been laid under more than 30,000 acres to draw off the high saline water and flush it out to the Salton Sea. More installations are constantly being laid on additional lands.

Unless this salty water is sluiced off to the Sea, farming would be doomed in many parts of the Coachella Valley. Only a few non-commercial plants have high enough salt tolerance to survive in ground saturated by high-saline water.

Since each acre foot of Colorado River water carries a ton and a third of salt in solution, each year sees more than 300,000 tons of the unwanted substance spread on cultivated acreages of the Valley. The on-farm drain lines and laterals maintained by the Coachella Valley County Water District, have accomplished a successful balance between the amount put into the soil and the amount extracted and dispatched to the sea.

## HOW LONG CAN IT LAST?

How long such a system can operate efficiently in the face of steadily mounting salt content of the water is a matter of a conjecture.

With the salt problem proliferating in Southland valleys, the need of counter measures became more urgent. For the past several years the Colorado River Board of California has been emphasizing to Federal officials that action is needed to curb the rising salt content.

The board is headed by Raymond R. Rummonds of Indio as its chairman. He represents the CVCWD on the state-appointed board of six members, chosen from the six public agencies sharing in the river's water.

It has been known for many years that a big percentage of the river's saline burden originates in salty springs and in valleys of high saline content located in Colorado. The immense cost of measures to eliminate this in-put have discouraged action. But now the problem is so serious that the Bureau of Reclamation has undertaken a positive feasibility study to determine what steps could be taken and estimate their cost.

## STAKES ARE HIGH

Myron Holburt, chief engineer of the Colorado Board of California, estimates that the immense total of 2,800,000 tons (5.6 TRILLION pounds) could be kept out of the river by control programs instituted in the upper stream areas. This would represent one-fourth of the

present salt content of the stream's waters.

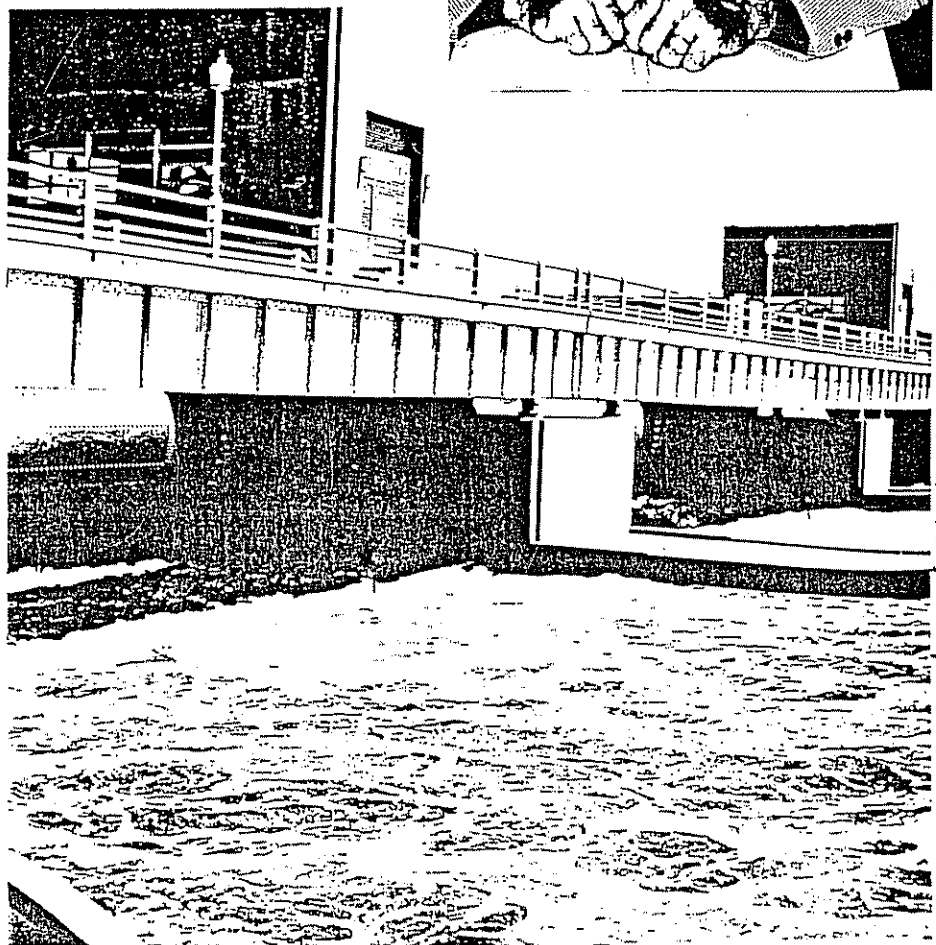
Growers in Southland valleys are hopeful that the present campaign can be successful and so they can see a leveling out of the saline contamination of their vital irrigation water.

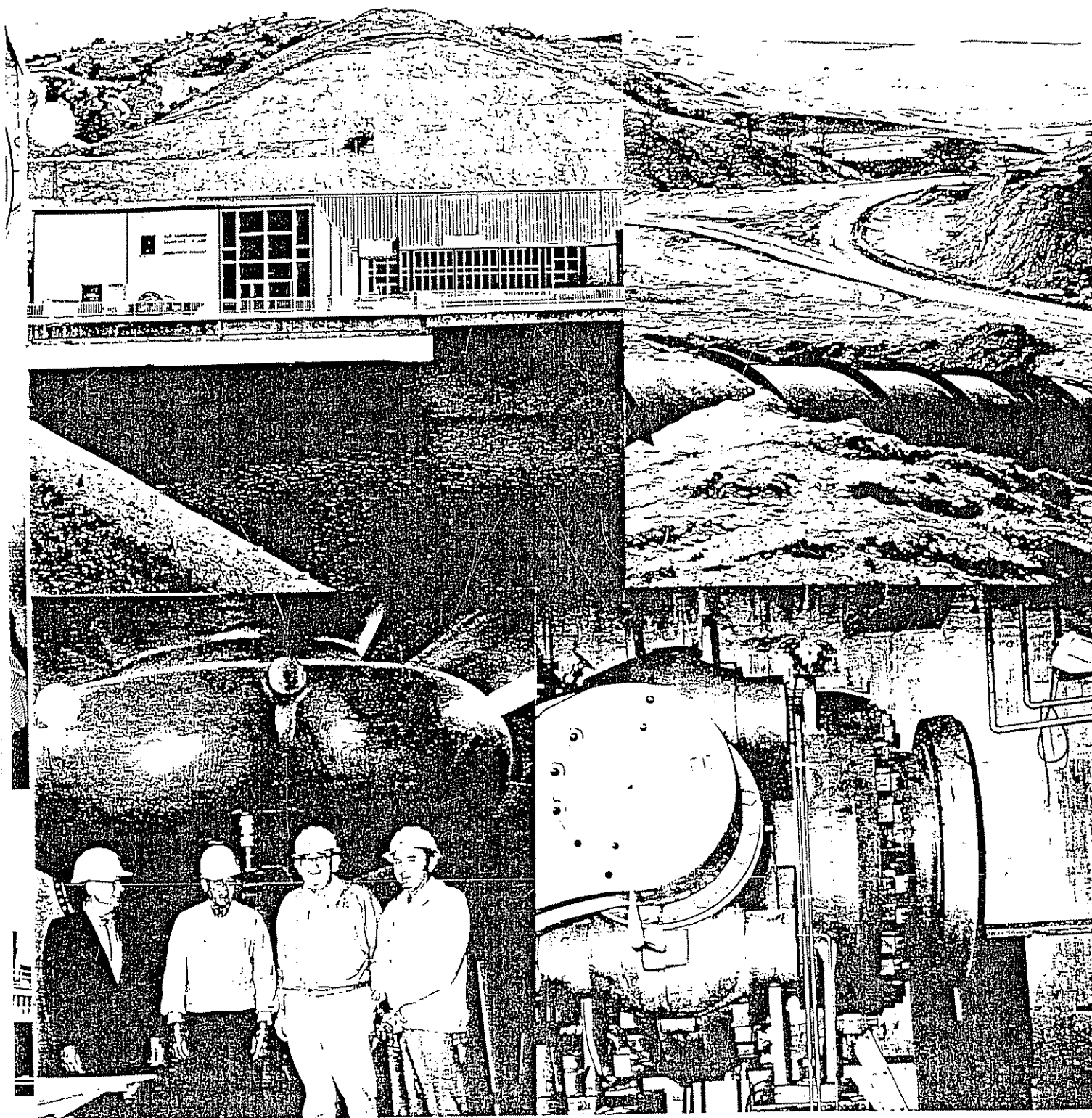
## BIG SYSTEM OF LINES

A total of 771 miles of distribution lines is required to carry the domestic water of the CVCWD to the more than 8,200 users located within its territory.



At right, Raymond R. Rummonds, of Indio, vice-president of the CVCWD, presides at a session of the Colorado River Board of which he has been chairman for the past seven years. Below, water destined for the Coachella and Imperial Valleys, is diverted from the Colorado River at Imperial Dam, 18 miles north of Yuma. The CRB has energetically supported Federal plans to keep nearly three million tons of salt out of the river annually through control projects in upper basin states. Salt content at Imperial Dam now is averaging more than 850 parts per million — a ton and third for each acre foot of water.





Edmonston Pumping Plant of the California Water Plan system, shown at top left photo, has been hailed as one of the engineering triumphs of the present century. The plant is located at the foot of the Northern Slope of the Tehachapi Mountains south of Bakersfield. The plant lifts the state water nearly 2,000 feet to the summit of the range from where it flows by gravity into Southern California. Beneath the building are four levels of mammoth pumps requiring 80,000 horsepower to hoist the water over the mountains. At top right can be seen the aqueduct winding across the

San Joaquin Valley floor and in the foreground the partially-buried pipe line through which the water is pumped to the mountain summit (Edmonston plant is out of sight to the right). At bottom, left, four members of the CVCWD board of directors — George Leach, C. Jack Frost, Leon Kennedy and Raymond R. Rummonds — pose before a part of one of the giant pumps. The picture at bottom right portrays another portion of one of the huge pumps. CVCWD is to receive 23,100 acre feet, and Desert Water Agency, 38,000 acre feet of Northern California water through the State system now nearly complete.

# Domestic Water

District Serving 8214  
Users As Areas "Come  
On Line" During Year

Domestic water users served in the 70-mile long territory of the CVCWD increased 15 percent during the past fiscal year as the District continued its program of expansion to meet household and commercial water needs.

As of July 1, the District was delivering water to 8,214 meters located all the way from the eastern edge of Palm Springs to Salton City and Bombay Beach 20 miles below the Riverside-Imperial County line on the shores of the Salton Sea. This represented a gain of 1,099 meters over the total on the same date in 1970.

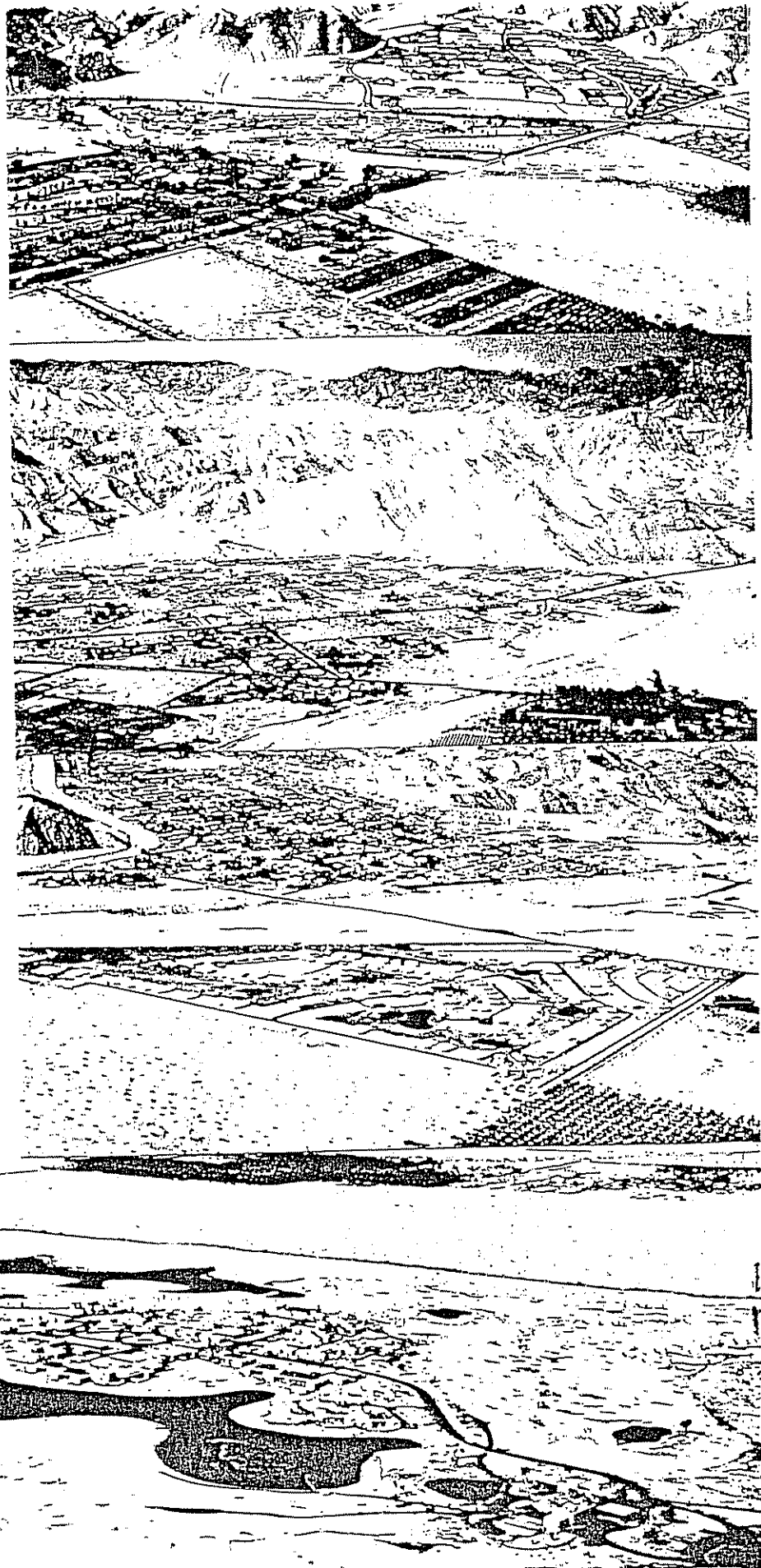
And the record of services is due for its largest gain in the months ahead as new residence and mobile home establishments in the Eisenhower Medical Center region come on the line. The service mark is expected to soar close to 10,000 within the next 12 or 18 months.

## TWO SYSTEMS ACQUIRED

Two of the largest blocks of new users of CVCWD domestic water reside in Rancho Mirage and Thunderbird Country Club home area. Systems serving these two residential areas were acquired by the District during the year.

(Please turn to page 22)

Four important established communities and new development projects that have begun using CVCWD urban water service during the past year are shown in the accompanying aerial photos. At top is Thunderbird Country Club, second from top is Rancho Mirage. Immediately below that photo is the Palm Springs Mobile Country Club northeast of Cathedral City, and at bottom, the luxurious Mission Hills Country Club located one mile east of Date Palm Drive and directly north of Tamarisk Country Club.







*CVCWD artesian well near Mecca, flowing at rate of 864 gallons per minute.*



*An enthusiastic booster for CVCWD domestic water makes very practical use of a new system serving her area, as four CVCWD personnel look on in merriment. Watching the impromptu shower are left to right: Foreman Bobby Winn, Domestic Water Supervisor Leon Swenson, Operations Supt. Earl Nelson, and Foreman Woody King. (See details in box at right.)*

## *Mecca Well Flows 864 Gallons Per Minute From Artesian Basin*

In the early years of development in Southern California artesian (free flowing) wells were common in many parts of the Southland.

But today most have disappeared under the constant pressure of pumping to supply an ever-growing water demand.

However, the Coachella Valley has one of the few remaining artesian basins. The force of this great underground reserve was demonstrated during the past year when a well was sunk to supplement the supply for communities along the northwest flank of the Salton Sea.

### **WELL NEAR MECCA**

The well, located a short distance below Mecca, developed a production of 464 gallons per minute under its own pressure.

Pumping was started by the CVCWD to step up the output. Its yield is now between 700 and 800 gallons per minute, with a possible maximum supply of close to 1,400 gpm.

The artesian basin extends from the Salton Sea northward to the vicinity of Coachella. When the Southern Pacific Railway first developed wells in the Valley nearly 100 years ago the area was found to yield flowing wells with only shallow diggings.

Expanding agricultural developments in the early part of the present century ended the era of artesian flows and deeper and deeper pumping was required.

With advent of Colorado River water in 1949 the heavy drag on the underground supplies of water was relieved, and the ground reserve began building back to its former position. Within a few years the artesian flows reappeared.

*With the temperature standing at 110° in the shade, Mrs. Harriet Terry inaugurated CVCWD domestic water service to her home area of Salton Sea Riviera.*

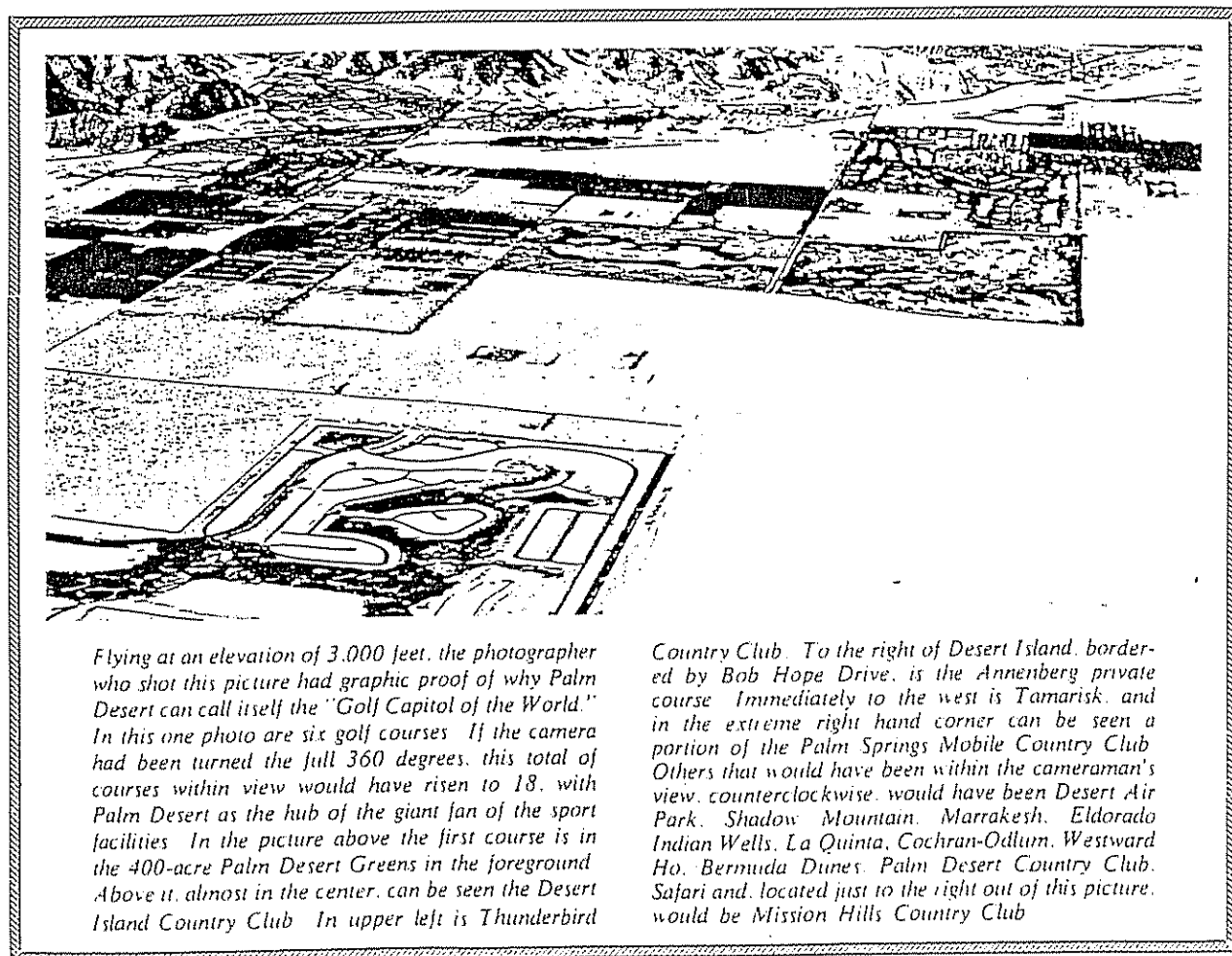
*After turning the tap in a fire hydrant and starting a heavy flow, she couldn't resist the temptation and so dived into the cooling stream. "Happiest day of my life!" she exclaimed. Her husband, John, agreed — his water-hauling days were over.*

*Plans for other small water systems were started by the CVCWD for subdivisions in Mecca and on the northside shore of the Salton Sea. Both bond and assessment procedures are used in financing the domestic water facilities.*



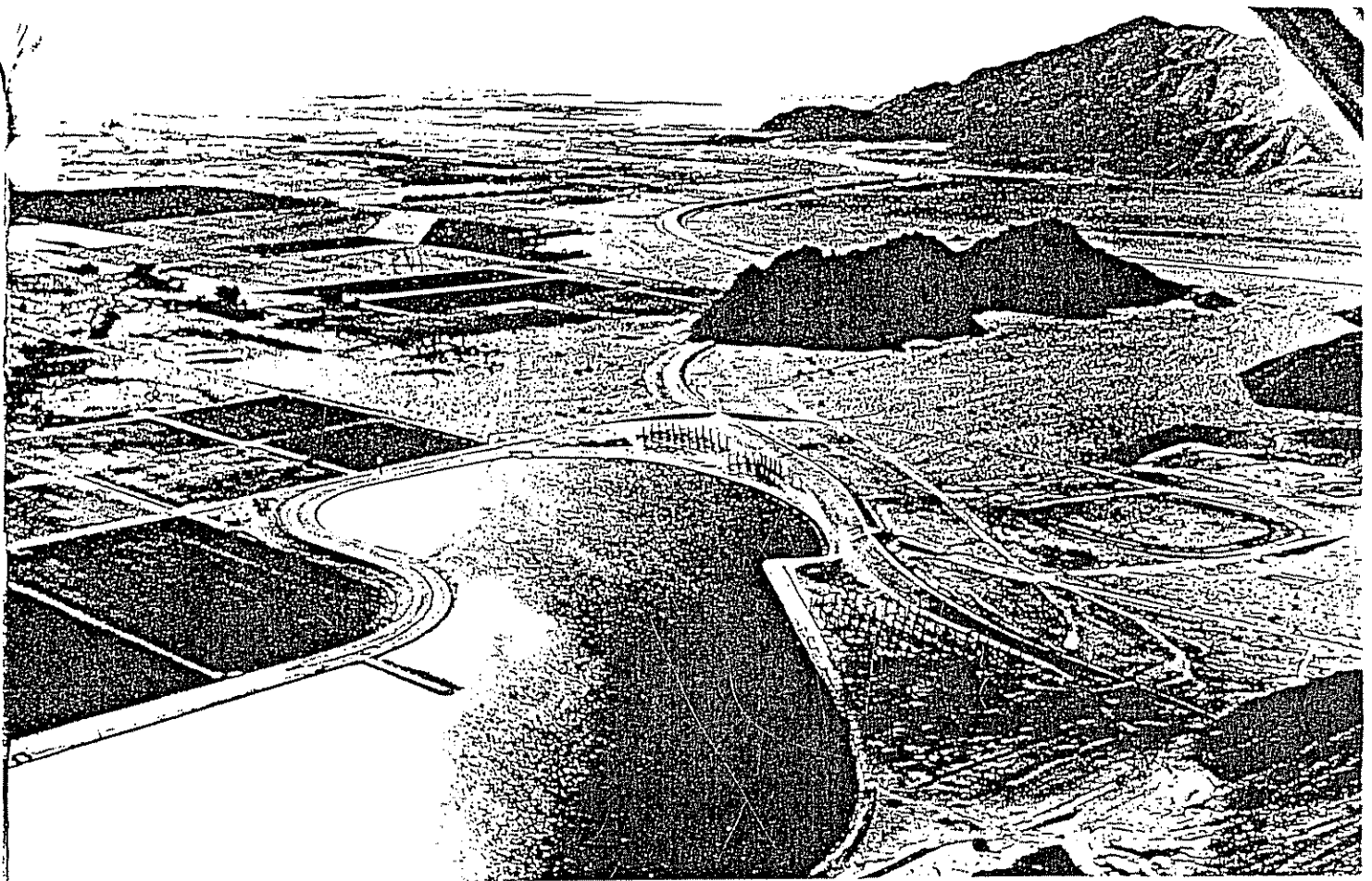
These four men comprise the management staff of the CVC-WD, directing the highly diversified program of the District in six water-related fields. They are, left to right, Olaf

Nordland, District secretary and executive assistant to the General Manager, Lowell O. Weeks, General Manager and chief engineer, Walter R. Wright, auditor, and Atty. M. C. Sherrill, District counsel



Flying at an elevation of 3,000 feet, the photographer who shot this picture had graphic proof of why Palm Desert can call itself the "Golf Capitol of the World." In this one photo are six golf courses. If the camera had been turned the full 360 degrees, this total of courses within view would have risen to 18, with Palm Desert as the hub of the giant fan of the sport facilities. In the picture above the first course is in the 400-acre Palm Desert Greens in the foreground. Above it, almost in the center, can be seen the Desert Island Country Club. In upper left is Thunderbird

Country Club. To the right of Desert Island, bordered by Bob Hope Drive, is the Annenberg private course. Immediately to the west is Tamarisk, and in the extreme right hand corner can be seen a portion of the Palm Springs Mobile Country Club. Others that would have been within the cameraman's view, counterclockwise, would have been Desert Air Park, Shadow Mountain, Marrakesh, Eldorado Indian Wells, La Quinta, Cochran-Odell, Westward Ho, Bermuda Dunes, Palm Desert Country Club, Safari and, located just to the right out of this picture, would be Mission Hills Country Club.



Workmen are shown busy on the County of Riverside first improvement contract at popular Lake Cahuilla, located on west side of Valley between Avenues 57 and 58. Lake is terminal reservoir of CVCWD and was leased without charge to County's Park Department which has long-range development program underway. Palms set out in first planting this

year are visible. Swimming beach is straight shoreline at lower right. Fishing pier is at lower left. Westside Dikes, No. 2 and 4, are clearly shown anchored on mountain foothill at lower right and Coral Reef in center, and then stretching from Coral Reef hills to Avenue 66 in distance. Dike system is  $4\frac{1}{2}$  miles long. Horseshoe shaped circle at right center is County gravel pit.

## LAKE CAHUILLA

County Parks Department Spends \$308,000 on First Development Program at Recreation Center

During recent months, Lake Cahuilla, the terminal reservoir constructed by the CVCWD and leased without cost to the County of Riverside, has received its first major development under a \$308,000 project awarded by the Parks Department.

Popularity of the recreation center for fishing and swimming has continued undiminished throughout the year despite the fact that for this period the premises have been in virtually an undeveloped state. County Parks Director Peter Dangermond reported to the CVCWD board recently that attendance for the nine months preceding June 30 had reached 34,638. April alone experienced 9,295 visits by the public. **PALMS ARE PLANTED**

In addition to the improvement contract, the parks department arranged for transporting to the lake site of 135 mature date palms moved from a right-of-way along the Whitewater River stormwater channel. This was the first

extensive planting thus far carried out.

The \$308,000 contract which was expected to be completed by early fall calls for construction of a concession stand, building of two restrooms and necessary sewage disposal systems; earthwork, roads, parking lots and digging of a well and installing of a distribution system for both drinking and irrigation use, all electrical engineering, and landscaping consisting of the planting of trees, turf grading and laying of an irrigation system.

### THREE ON LAKE STAFF

Three full-time personnel are on duty at the lake. Dangermond disclosed in a report recently that there has been considerable interest on the part of potential concessionaires in contracting for operating facilities at the lake but no definite decision had been made at mid-summer as the awarding of the contract.

Lake Cahuilla, named for the immense ancient lake that covered the

Coachella Valley for untold centuries, serves as a storage point for CVCWD irrigation water and is used continually in the irrigation service of the District. It contains approximately 1,500 acre feet of water and is fed by the Coachella Canal which terminates at the west side of the lake after crossing 123½ miles of desert and Valley lands after taking off from the main All-American Canal east of Holtville.

### DAILY USE IS HEAVY

It requires a daily average of 10,453,845 gallons of water to meet the household and commercial uses in the domestic water system of the CVCWD. And during the peak month—June—the average rises to 14,696,813 gallons.

To maintain this supply to the more than 8,200 users within the District, the domestic water division drew 4½ billion gallons of water from the underground during the year.

# WATER SALVAGE

CVCWD To Build First Regional  
Sanitation Treatment Plant  
To Serve Numerous Communities

On a broad front the Coachella Valley County Water District has moved during the past year to assist communities and developing areas to obtain modern outfall sanitation systems and thereby supplant unsatisfactory and costly septic tank facilities.

Out of the present push in this field will come the District's first central multi-community water salvage plant caring for the needs of a wide area radiating out from the Eisenhower Medical Center on Bob Hope Drive. It is possible that this facility eventually will serve an area extending from Rancho Mirage to Point Happy.

**TWO BEING BUILT**  
In the meantime the District has assisted two smaller Salton City communities to proceed with installation of central treatment plants. These are being provided in North Shore Beach and Desert Beach, and in Bombay Beach. Bonds were voted in both areas to finance the work, made necessary in these instances due to the high water table around the sea.

The District already operates one

water salvage plant this one serving the Palm Desert Country Club community. It was acquired by the District in 1968 along with the domestic water system serving the same area.

Impetus to the water salvage program has been lent in the past two years by action of the Federal and State governments in appropriating funds to assist such projects. Under the most favorable conditions the Federal-State combination will provide as much as 80 percent of the cost.

## ASKED FOR LEADERSHIP

Development of the water salvage facilities for the Palm Desert-Eisenhower area was triggered by a request from major developers in the area that the Water District take the leadership in providing central facilities. These establishments include, besides the Eisenhower Medical Center which probably will have been dedicated by the time this publication is distributed, the \$20,000,000 Desert Island Country Club and Condominium, and the extensive Palm Desert Greens, 400-acre mobile

home and country club on Country Club Drive.

Improvement districts No. 16 (water) and 53 (sanitation) were formed by the CVCWD and voters in the area approved issuance of \$8,500,000 in bonds to finance the domestic water service and a collector system for sewage. Of these bonds the District sold an initial batch of \$1,600,000—\$300,000 for water and \$1,300,000 for the sanitation program.

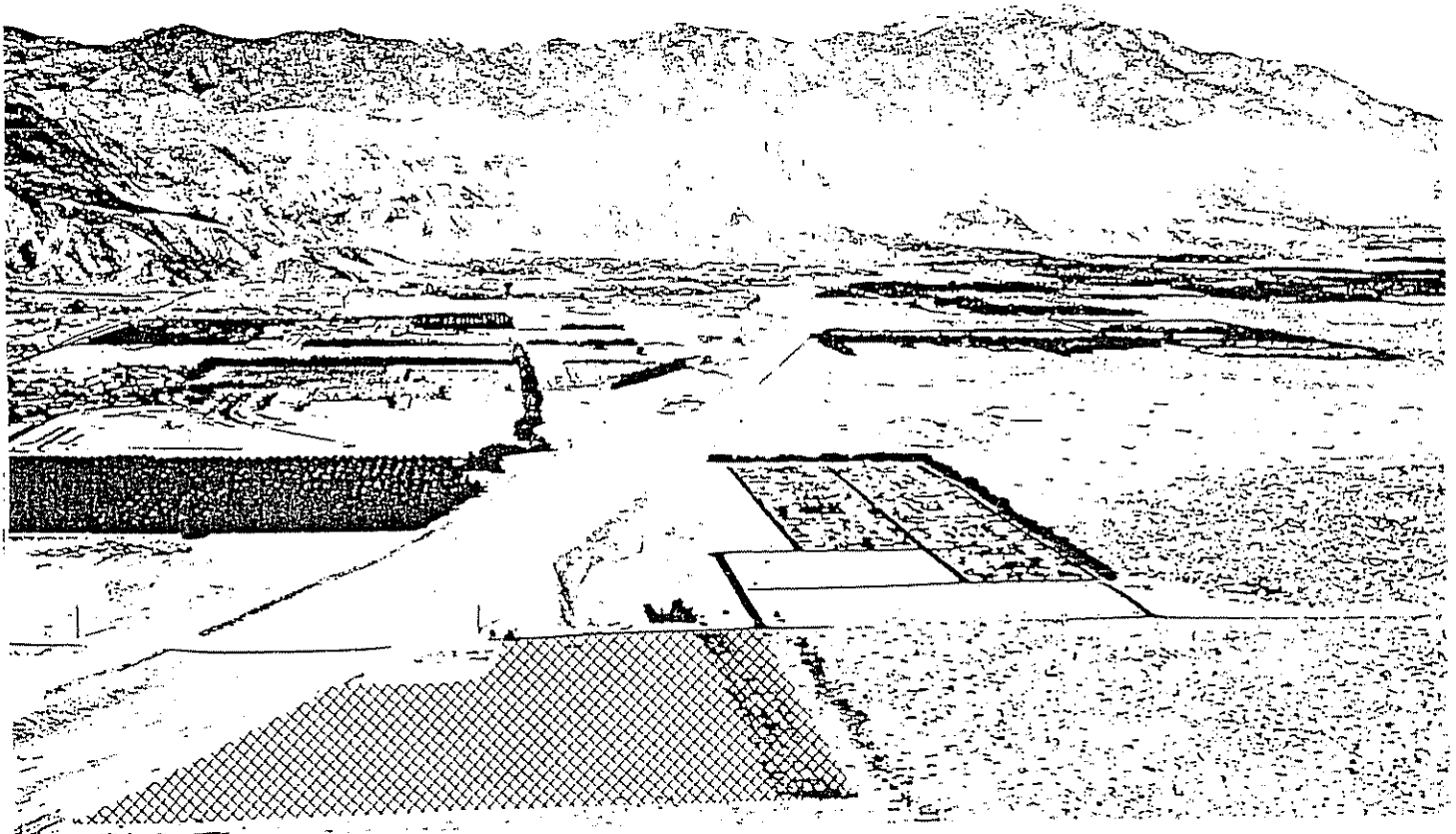
**ON FILLED TERRAIN**  
A site for the central treatment plant was selected by the District's engineers alongside the Whitewater River Stormwater Channel just east of Cook Street. At this point a massive filling job was being carried out under a separate stormwater contract to eliminate a giant "S" curve in the old channel route. A 27-acre site was developed from the filled area and adjoining lands.

Meanwhile, a contract was let for the laying of seven miles of a collector system within the improvement district which embraced 3,093 acres, generally.

(Continued on next page)

On the cross-hatched 27-acre site in the foreground the CVCWD will construct the Palm Desert Water Salvage plant, possibly within two years, to handle the sewer effluent from an area extending from Rancho Mirage on the west to Indian Wells on the east. Communities in that territory will decide whether they wish to participate. First use of the plant will be serving Improvement District No. 53, comprising the Eisenhower Medical

Center, Desert Island Country Club and Palm Desert Greens, big mobile home country club. The plant site is on filled ground at Cook Street resulting from realigning of the Whitewater River Stormwater Channel, shown diagonally cutting through valley. CVCWD contract during last summer eliminated historic "S" curve at this location. Plant site surrounds radio transmitter KGUY. Reclaimed water will be used for irrigation of golf courses or for growing grass in the storm channel.



## North Shore Area And Bombay Beach Getting Sanitation Systems

bounded by Bob Hope Drive with addition of Desert Island 160 acres; extension of Wonder Palms Road, Cook Street and the stormwater channel.

At about the same time interest in modern sanitation systems was developing in Palm Desert and Indian Wells, prompting the District to hold off on construction of the Cook street plant until the eventual required capacity could be determined. It now is considered probable the construction will be delayed two or three years.

GOES TO PDCC

Faced with the necessity for meeting the needs of the Eisenhower area the District decided to install temporary lines and facilities making possible the treatment of the effluent at the existing plant at the Palm Desert Country Club (formerly Palm City.) It has sufficient unused capacity to meet the needs for two or three years.

A pumping plant will operate at the Cook Street terminus of the seven-mile collector system and this will send the effluent through 8,000 feet of pipe to the PDCC plant.

Acting on the request from community organizations in Palm Desert, the CVCWD authorized an engineering study to determine what would be involved in a project under which that area would hook into the Cook Street facilities. The City of Indian Wells also has expressed an interest in the same arrangement and has the possibility under study.

Presentations will be made by the District to Federal and State authorities late in 1971 requesting financial assistance in constructing the regional water salvage plant and it is thought possible the cost may approach two million dollars should the wider use of the facilities develop.

## VALLEY CROPS

(Continued from page 5)

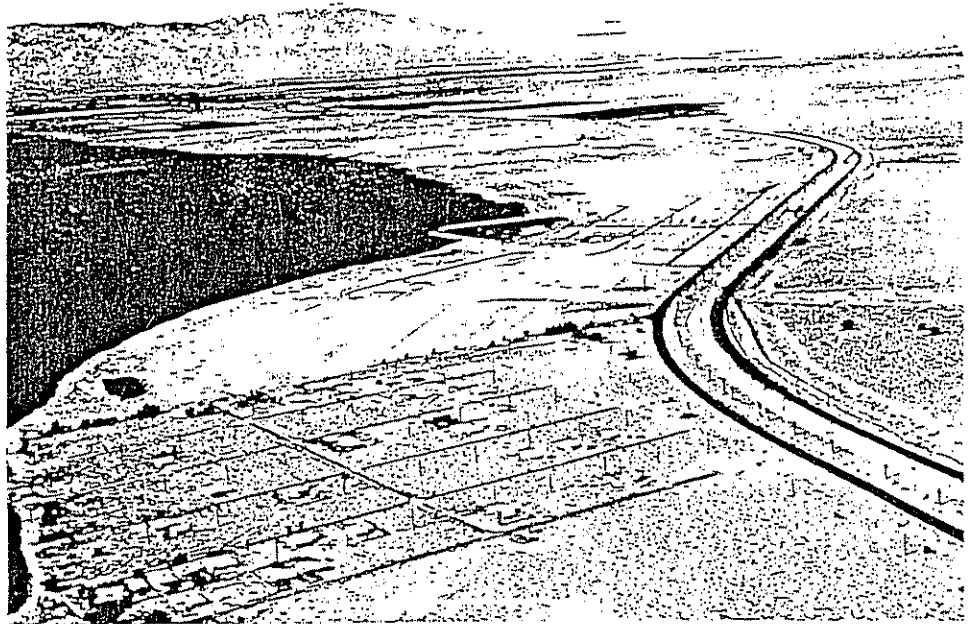
In the field crop category the largest return was from cotton, amounting to \$607,200 from production on 3,438 acres where 5,520 bales were grown. Alfalfa was second at \$316,181 with 1,232 acres devoted to this crop and sudan was next at \$201,750.

Wheat was worth \$93,840; oat hay sold for \$37,750; sorghums yielded \$15,360, and permanent pasture was figured at \$87,600 for 1,752 acres.

The Valley has one nut crop—pecans which are listed for 33 acres. But there was no harvest from that planting in the year.

## CVCWD OPERATES 61 WELLS

In the extensive domestic water system reaching from near Palm Springs to 20 miles below the county line into Imperial County, the CVCWD operates 61 wells. The district also uses 51 reservoirs that have a total capacity of 9,223,888 gallons. Main gate valves number 7,316 and fire hydrants 2,906.



After a wait of five years, North Shore Beach and Desert Beach, located on the shore of the Salton Sea, are to get their water salvage system for which bonds were voted in 1965. The bonds have been sold by the CVCWD, thanks to an improved bond market. The two paralleling curves at right are Highway 111 and SP railway. Interestingly, this picture shows the lowest and highest points in Riverside county — Salton Sea, 232 feet below sea level, and San Jacinto Peak, 10,831 feet high, or a range of 11,063 feet.



This water salvage plant, serving the Palm Desert Country Club on Washington Street, was the first to be operated by the CVCWD, starting in 1968. During the past year 41 1/2 million gallons of water reclaimed by the plant were reused for irrigation of the 18-hole golf course.



# Data Tells Scope of CVCWD Service

## GENERAL INFORMATION

YEAR DISTRICT FORMED — 1918

MAKEUP OF GOVERNING BOARD — Five member Board of Directors, elected by voters from divisions, each member serving four years.

FIELDS OF SERVICE — Irrigation Water, Domestic Water, Stormwater Protection, Sanitation, Farm Drainage and Water Conservation.

AREA WITHIN DISTRICT — Total of 620,451 acres, lying principally in Riverside County but smaller areas within Imperial and San Diego Counties

ASSESSED VALUATION — \$219,470,546, as of July 1, 1971 (Assessed valuations, as a general rule, are approximately one-fourth of market value as fixed by County Assessor)

## IRRIGATION WATER SERVICE

### USE OF WATER

Total Area Served (acres)	78,000
Active Accounts	971
Total Accounts	1,477
Average Daily Consumption (acre feet)	826
Water Sales, Fiscal Year (acre feet)	301,571
Maximum Daily Demand (acre feet)	892

### GROWTH OF SYSTEM

Reservoirs	2
Storage Capacity (acre feet)	1,673
Total Miles of Distribution System	493
Pumping Plants	22
Utility Plant Value	\$28,773,860
Total Miles of Canal	123.5

## DOMESTIC WATER

### USE OF WATER IN FISCAL YEAR, 1970-71:

1 Average population served	21,531
2 Active services	8,214
3 Average daily consumption in gallons	10,453,845
4 Average gallons per capita per day	486
5 Average daily consumption for peak month	14,696,813
6 Annual production (gal)	4,534,509,362
7 Water sales (gal)	3,815,653,580

## SYSTEM GROWTH

8 Active wells	61
9 Reservoirs	51
10 Reservoir storage capacity (gal)	9,223,888
11 Distribution lines (miles)	771
12 Main gate valves	7,316
13 Fire hydrants	2,906

## STORMWATER PROTECTION

### PRINCIPAL PROJECT IN 1970-71:

Reconstruction of 12,100 feet of Whitewater River Stormwater Channel East and West of Cook Street crossing, including addition of Drop Structure one-fourth mile below Avenue 44 crossing, and filling of portion of deep gorge east of Cook Street to be used as sanitation plant site for Improvement District No. 53

Continued channel reconstruction by CVCWD in area close to Salton Sea

## AGRICULTURAL DRAINAGE

ON-FARM LINES INSTALLED BY OWNERS IN YEAR — 22.2 miles

DISTRICT OPEN DRAINS REPLACED BY UNDERGROUND PIPE — 500 feet.

TOTAL OF ON-FARM DRAINS — 1,870 miles.

OUTFALL LATERALS MAINTAINED BY DISTRICT: — 159 miles of pipe, and 20 miles of open ditches

ACREAGE SERVED BY FARM DRAIN LINES AS OF JUNE 30, 1971 — 31,205

## SANITATION

IMPROVEMENT DISTRICT No. 53 (Area of 3,093 Acres in Vicinity of Eisenhower Medical Center) Bond issue revenue used to finance seven-mile long system of collector trunk lines and site improvement on Palm Desert Water Salvage Plant at Cook Street; installing temporary pumping plant at plant site, and laying of 8,000 feet of line to Palm Desert Country Club Treatment plant.

SALE OF BONDS TO FINANCE WATER SALVAGE SYSTEM FOR NORTH SHORE BEACH AND DESERT BEACH, AND BOMBAY BEACH

INAUGURATING OF FEASIBILITY STUDY OF SANITATION SYSTEM FOR PALM DESERT COMMUNITY

(District has operated water salvage facility at Palm Desert Country Club since 1968)

## WATER CONSERVATION

INITIAL MAJOR IMPROVEMENT (\$308,000) made by Parks Department of Riverside County at Lake Cahuilla terminal reservoir installation of CVCWD, leased to county without cost for use as a recreational center. (Attendance, October 1970 to June 1971, total of 34,638)

CVCWD, in joint effort with Desert Water Agency, financing study by U. S. Geological Survey of percolation data on Whitewater River Spreading Ground preparatory to receiving supplemental water under California State Water Plan

## Salton Sea's Future Studied Under Federal B of R Fund Awards

Two federally-financed projects focused widespread attention on the Salton Sea in recent months.

President Nixon signed a bill, authored by Congressman Victor Veysey of the Riverside-Imperial county district giving the Bureau of Reclamation a \$150,000 appropriation to undertake a feasibility study of ways to check rising salinity in the 34-mile long inland body of water.

Support for the Federal study had been given by scores of organizations, public officials and throngs of individuals who hope that the study will come up with some workable plan to prevent the increasing salt content from reaching a level where it would threaten existence of the fish in the waters. Various solutions have been offered, with varying price tags.

In the second federal program, the Bureau also is continuing its far-reaching investigation of the geothermal reserves below the sea near its southern end in Imperial Valley.

Hopes are held high by some scientists that the vast steam deposits may offer a new source of water to supplement the Colorado River, and also provide a new power source. Federal officials have reported they are convinced there is a tremendous geothermal reserve underground; the problem is chiefly how to harness it. The Federal department expenditure in this promising research has approached half a million dollars, with more to spend as needed.

## RIVER WATER RESERVES AT RECORD HIGH LEVEL

Water stored in the nine dams along the 1300-mile length of the Colorado River rose to the highest point in history during the past summer.

In July, end of the normal April-July period of high runoff in the stream, the combined total of the nine reservoirs amounted to 38,121,000 acre feet, 63 percent of the total capacity.

This total is nearly 10 million acre feet above the mark for the same month of 1968, and was 2,930,000 acre feet above the combined storage in July of 1970. The dams' contents have risen steadily since the end of the record drought period in Western United States in 1963.

### MOST IN TWO LAKES

Almost 31 million acre feet of this year's high volume in the lakes is held in Lakes Mead and Powell, the former impounded by Hoover Dam and the latter by Glen Canyon Dam. Mead contained 16,615,000 acre feet, and Powell held 14,318,000 af, for a combined total of 30,933,000 acre feet.

Lake Powell, main upper basin storage point, has recorded a swift increase in water reserves during the past three years. In 1968 the lake, which eventually will be 186 miles long when it is filled, contained only 7,568,000 acre feet.



On most any day of the year an interested viewer can see at the Palm Desert Country Club (formerly Palm City, on Washington Street) an effective reuse of reclaimed sewage water.

The salvage water, reclaimed in a sanitation plant operated by the CVCWD at the southern edge of the community, is used for irrigating the golf course around which the homes were constructed.

4 1/2 million gallons were used in 1971 on the golf course irrigation. The salvaged water is run from the plant into lagoons from which it is drawn by the golf course system and pumped under pressure into the overhead sprinkling system.

The CVCWD operates the domestic water system for the PDCC.

## Effort to Prevent Lake Filling Fought by CVCWD

The CVCWD in recent months has joined other public and private agencies in the West in opposing attempts of ecology oriented groups to prevent the filling of Lake Powell on the Colorado River.

Court action was started by the opponents to compel the Bureau of Reclamation to maintain the lake's level 100 feet below its maximum height, alleging that damage would otherwise result to the Rainbow Bridge located near the eastern bank of the lake 58 miles above the Glen Canyon Dam.

Federal officials denied there would be any peril to the famed arch. They won a change of venue from Washington, D.C., to Salt Lake City, and will strongly oppose the plaintiffs in the suit with the help of the Western states that would be affected by any cessation in the continuing effort to fill Lake Powell, main upstream storage location of the Colorado. It is located in upper Arizona and Lower Utah, and will be 136 miles in length when filled.

The lake's surface now is approximately 3,600 feet and will rise to 3,700 feet eventually. It contains more than 12 million acre feet of water and will have 25 million at the 3,700 foot mark.

or about half its present total.

Other lakes along the river's course are Flaming Gorge, Fontenelle, Navajo, Blue Mesa, Morrow Point, Mohave and Havasu. Flaming Gorge in upper Utah and lower Wyoming, is the largest of the smaller reservoirs, holding 3,042,000 acre feet in July. Mohave, (Davis Dam) between Arizona and Nevada, was second with 1,475,000 acre feet.

## Credit Union Is Real Boon to CVCWD Workers

How helpful a credit union can be to the employees of a firm or public agency has been clearly shown in the success of the Federal Credit Union of the CVCWD Employees.

Since its formation years ago the Credit Union has made 371 loans with a total value of \$110,459. It is shown in a report submitted by Mrs. Ann Hamilton, secretary to Gen. Mgr. Lowell O. Weeks who also serves as treasurer of the credit organization.

During the first ten months of this year there were 112 loans totaling \$38,563.

### REPAID BY DEDUCTIONS

The amounts are repaid by deductions from salaries and wages. Losses during its period of operation, resulting from persons separating from the District before the loans have been repaid, have been negligible.

The Credit union has 199 members, including 20 family members and its assets as of this date are \$48,789.79. Loan limits range from \$1,000 for unsecured loans, to \$2,000 when the indebtedness is share secured. Since the district's employment rolls generally carry between 180 and 190 persons, it is obvious that membership is close to 100 percent.

## HEAVIEST WATER USES

June is the month of heaviest domestic water use in the CVCWD, but August records the greatest draw on the irrigation water.

During the past year domestic water users needed 58,939,700 cubic feet of water in June. Farmers used 36,816 acre feet in August.

**COACHELLA VALLEY COUNTY WATER DISTRICT**  
**CONDENSED BALANCE SHEET**  
**JUNE 30, 1971**

**ASSETS**

<b>PROPERTY, PLANT AND EQUIPMENT</b>		
All-American Canal and Distribution System (Participating Equity)	\$27,724,502	
State Water Plan (Participating Equity)	1,877,328	
Land, works and equipment	<u>35,221,417</u>	
	64,823,247	
Less accumulated amortization and depreciation	<u>9,291,014</u>	\$55,532,233
Construction work in progress		2,008,338
<b>INVESTMENTS AND OTHER LONG-TERM ASSETS</b>		
Assets (Restricted for Liabilities, Construction, Future Development, and Other Purposes)	4,376,760	
Notes and contracts receivable (Unrestricted)	<u>453,555</u>	4,830,315
<b>CURRENT ASSETS</b>		
Cash in bank and temporary investments	925,849	
Accounts receivable, inventory and prepaid expenses	<u>864,871</u>	1,790,720
<b>DEPOSITS AND OTHER ASSETS</b>		
		<u>110,444</u>
<b>TOTAL ASSETS</b>		<u><u>\$64,272,050</u></u>

**LIABILITIES AND FUND BALANCES**

<b>LONG-TERM LIABILITIES</b>		
Contracts Payable		
U S — Works construction	\$26,527,056	
State — Works construction	321,604	
Water Systems acquired	4,941,911	
Refunding agreements (Construction Costs Advanced)	<u>1,965,901</u>	
	33,756,472	
Notes and Bonds Payable	<u>6,239,000</u>	\$39,995,472
<b>CURRENT LIABILITIES</b>		
Current portion of contracts and bonds payable	1,887,463	
Accounts payable	567,601	
Customers advances and deposits	97,890	
Accrued salaries, interest and other expenses	<u>350,375</u>	2,903,329
<b>TOTAL LIABILITIES</b>		\$42,898,801
<b>FUND BALANCES (Equity in Assets)</b>		
		<u>21,373,249</u>
<b>TOTAL LIABILITIES AND FUND BALANCES</b>		<u><u>\$64,272,050</u></u>

COACHELLA VALLEY COUNTY WATER DISTRICT  
Condensed Statement of Revenues and Expenditures  
Fiscal Year Ended June 30, 1971

REVENUES

Water sales	\$ 915,951	
Irrigation	1,014,063	\$1,930,014
Domestic		
Water availability charges	265,525	
Irrigation	271,638	537,163
Domestic		2,959,385
Taxes		180,651
Meter installation and service fees		25,286
Power rental		25,588
Trust income		158,062
Interest		95,841
Miscellaneous		<u>\$5,911,990</u>
<b>TOTAL REVENUES</b>		

EXPENDITURES

Operation and Maintenance	\$ 871,402	
Irrigation and drainage systems	664,549	
Domestic water systems	39,079	
Sanitation system	161,682	\$1,736,712
Stormwater works		
Administrative and General	816,349	
Administrative, general and interest	283,329	
Engineering	68,363	
Buildings and grounds	181,426	1,349,467
Fixed costs and miscellaneous		1,806,559
Contract payments		1,198,079
New Construction, Rights of Way, Extensions, Betterments and Replacements		(178,827)
Expenditures in excess of revenues		<u>\$5,911,990</u>
<b>TOTAL EXPENDITURES</b>		

Ellis, Bucchino & Harrington

CERTIFIED PUBLIC ACCOUNTANTS  
SUITE 112 ELLIS BUILDING  
45-561 OASIS STREET  
INDIO CALIFORNIA 92201  
(714) 347-3557

WADE G. ELLIS C.P.A.  
JOHN BUCCHINO C.P.A.  
JAMES C. HARRINGTON C.P.A.

MEMBERS OF  
AMERICAN INSTITUTE OF  
CERTIFIED PUBLIC ACCOUNTANTS  
CALIFORNIA SOCIETY OF  
CERTIFIED PUBLIC ACCOUNTANTS

Board of Directors  
Coachella Valley County Water District  
Coachella, California

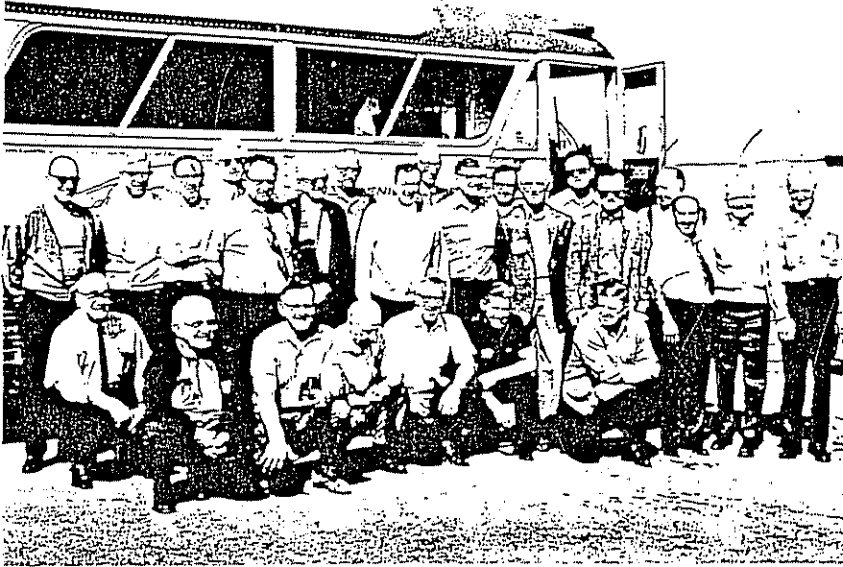
We have examined the condensed financial data of the Coachella Valley County Water District as set forth in the accompanying condensed balance sheet and condensed statement of revenues and expenditures. This financial data represents compilations and extracts from the balance sheet, statement of revenue and expenses, and statement of changes in fund balances included in the District's annual report at and for the year ended June 30, 1971. That report contains our unqualified opinion dated October 8, 1971 on the fairness of presentation of Coachella Valley County Water District's financial position at June 30, 1971 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

In our opinion, the accompanying condensed financial data presented in the condensed balance sheet and condensed statement of revenues and expenditures have been properly compiled from the balance sheet, statement of revenues and expenses, and statement of changes in fund balances included in the annual report of the Coachella Valley County Water District on the basis set forth therein.

ELLIS, BUCCHINO & HARRINGTON

October 8, 1971  
Indio, California

## Urban Water Revenues Top Million-Dollar Mark For First Time



One of the most important and influential groups that visited the Coachella Valley during the past year was a party of Northwest and Canadian Water officials who were hosted by the CVCWD on an overnight stop and tour. The visitors were on a four-day tour sponsored by the Colorado River Association, in which the CVCWD holds membership, to inform them of the water problems of California and Arizona. They are shown in the above photo on a visit to the revolving screens of the CVCWD canal system east of Mecca, accompanied by local water leaders.

Underscoring the continuing residential commercial and recreational construction throughout the valley, the CVCWD revenue from domestic water for the fiscal 1970-71 year surpassed the income from irrigation water sales for the first time in the District's history. And, too, the yield also exceeded one million dollars for the first time.

Sales of domestic water reached \$1,014,003 in the 12 months ending June 30, 1971. Irrigation water sales in the same period were \$915,951. In 1970 the same totals were \$873,998 and \$958,143.

The increase in the domestic water tolls results from a continual rise in new connections. During the past year the meters served by the CVCWD climbed from 7,115 to 8,214. Part of this gain was represented by acquisitions of existing water companies, but the District also has experienced a constant growth in other parts of the service area.

Indications now are that the domestic water revenues are due for a sharp gain as the hundreds of new condominium and mobile dwellings of the Eisenhower Medical Center territory come on the line. A 10,000 meter total is foreseen by CVCWD management for the next year or 18 months.

## Stormwater (Continued)

(Continued from page 9)

spread out on the plain occupied by Indio and Coachella. Millions of tons of eroded soil were spread on the latter area during a week-long flow of the river. (As one of the first projects in the Whitewater reconstruction, the main channel was rebuilt to encircle Indio on the west and north.)

Persons who recall the storm say the river flowed a mile wide through the Indio section, threatening at one point to wash away the entire fledgling community.

### SERVES VAST AREA

The Whitewater storm course acts as a giant collector system for the many flows that emerge from canyons along its 50-mile length to the Salton Sea. It must gather in the flood waters originating in the San Geronimo Pass as far westward as the 2816-foot summit at Beaumont; the immense outpouring of water from the Whitewater Canyon, and the flows from Snow and Falls Canyons, Chino, Tachevah, Tahquitz, Murray, Palm, Cathedral, Magnesia and Deep Canyons, and many smaller ones on the south side of the valley.

And at the western side of Indio it must also accept the runoff accumulated on the north of the valley and flowing down its tributary the Thousand Palms channel that joins the Whitewater just north of the Southern Pacific Railway bridge.

The Coachella Valley is in the ironic

## DOMESTIC WATER

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through purchase on long-term repayment plans.

In the same area, new installations served by the District are the Palm Springs Mobile Home Country Club and the Caliente Sands.

Farther to the north from that point the impressive new Mission Hills Country Club also hooked into the District system in the year.

On the west side of the Salton Sea a new system was provided for the Salton Sea Riviera. Financing and construction steps were taken for several other smaller units where service will start in months ahead.

### FINANCED BY USERS

In areas where new services have been installed, they were financed by either bonds or assessment districts, with the costs to be retired from taxes and water tolls levied within those boundaries alone.

In the case of the big Eisenhower M C region water and sanitation system bonds amounted to \$8,500,000 of which

position as far as floods are concerned to be confronted with storm waters originating elsewhere and flowing through its territory. Mountain ranges to the south and west of the valley produce virtually all the immense flow during storms. Often in storm periods the valley will have received only a sprinkle from the rainstorms but must

## RESERVOIR SAVES WATER

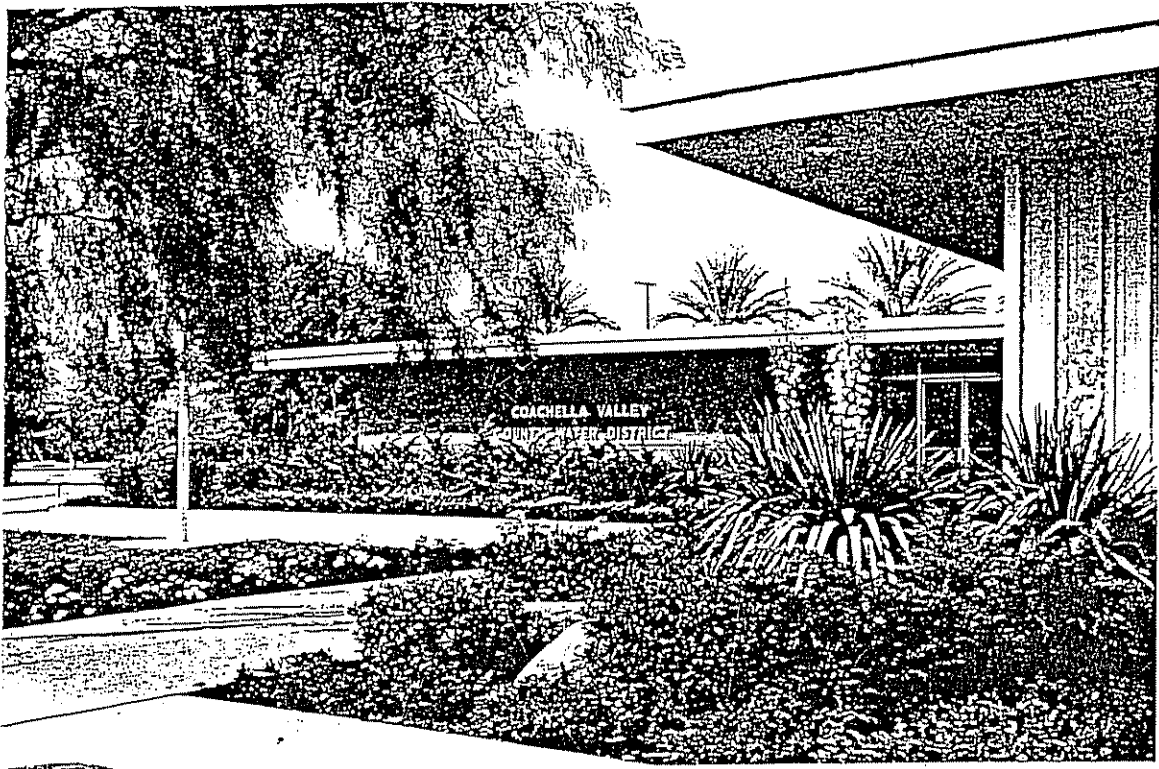
As in previous years, the Senator Wash reservoir located near Imperial Dam on the Colorado River held to a mere trickle the excess river water that had to be released to Mexico beyond the stipulated annual allotment of 1,500,000 acre feet. The reservoir was constructed by the Bureau of Reclamation at a cost of \$5,000,000, a cost that will be defrayed in a very few years in conserved water. Prior to its construction excess water not needed at Imperial Dam because of changes in weather after orders had been placed, had to be released into the river to flow to Mexico since Imperial has a very limited storage capacity.

cope with the enormous mountain-spawned inundations only the first increment of \$1,600,000 was sold. The others will be retained for future expansion.

The total of water services (8,214) does not represent the whole story of individual use of the District water. Many are "master meters" such as a mobile home where one meter may serve hundreds of residents.

The District pumped 4½ billion gallons of water from 61 wells to serve its domestic system in 1970-71. Average daily consumption was 10,453,845 gallons, and the highest daily use reached a peak of 14,696,813. The population within the service area is estimated at 21,531. (This figure is exclusive of Indio and Coachella cities which operate their own water systems.)





## BRIEF HISTORY OF CVCWD

Created by the voters of the Coachella Valley in 1918 when the outside encroachment on water rights and sagging underground water tables caused serious alarm, the Coachella Valley County Water District has grown through the years to a point where its activities are conceded to be the most diversified of any similar public agency in the U. S.

The District imports Colorado River water for irrigation of more than 52,000 acres of farmlands, supplies urban water to more than 8,200 users in a 50-mile service area, constructs flood protective works over a large territory, operates community sanitation treatment plants, directs an intensive farm drainage program to protect crops from high-saline water, and constantly carries on broad conservation programs designed to make the best possible use of the precious water supplies.

One of the District's early achievements following its formation was to gain inclusion in the historic Hoover Dam-American Canal program on the Colorado River. Construction of the 123½-mile Coachella Canal was provided for in this legislation, the work being completed in 1949. The project cost \$13,500,000. Installation of 500 miles of underground distribution system cost another \$13,500,000. The combined cost is being repaid to the U. S. Government over a long period of years.

Colorado River water imported through the canal triggered a vast land development program under which cultivated acreage in the valley shot upward from 15,000 to 65,000 acres. The District now brings in more than 300,000 acre feet of river water annually for irrigation.

A separate stormwater protective district, formed here prior to 1918, dissolved in 1937 and turned over its duties to the CVCWD. Since that time the District has invested millions of dollars in urgently-needed flood protective works along the immense mountain frontage encircling the Valley. A 12-year reconstruction program is being

carried out along the Whitewater River course from Whitewater Canyon to the Salton Sea.

Irrigation with river water on a greatly increased scale created a serious farm drainage problem and the District, cooperating with the farmers, has directed a broad drainage project during the past 20 years. A big grid of 2,000 miles of lines criss-crosses the valley to carry off the unwanted high-saline water from growing crops to the Salton Sea.

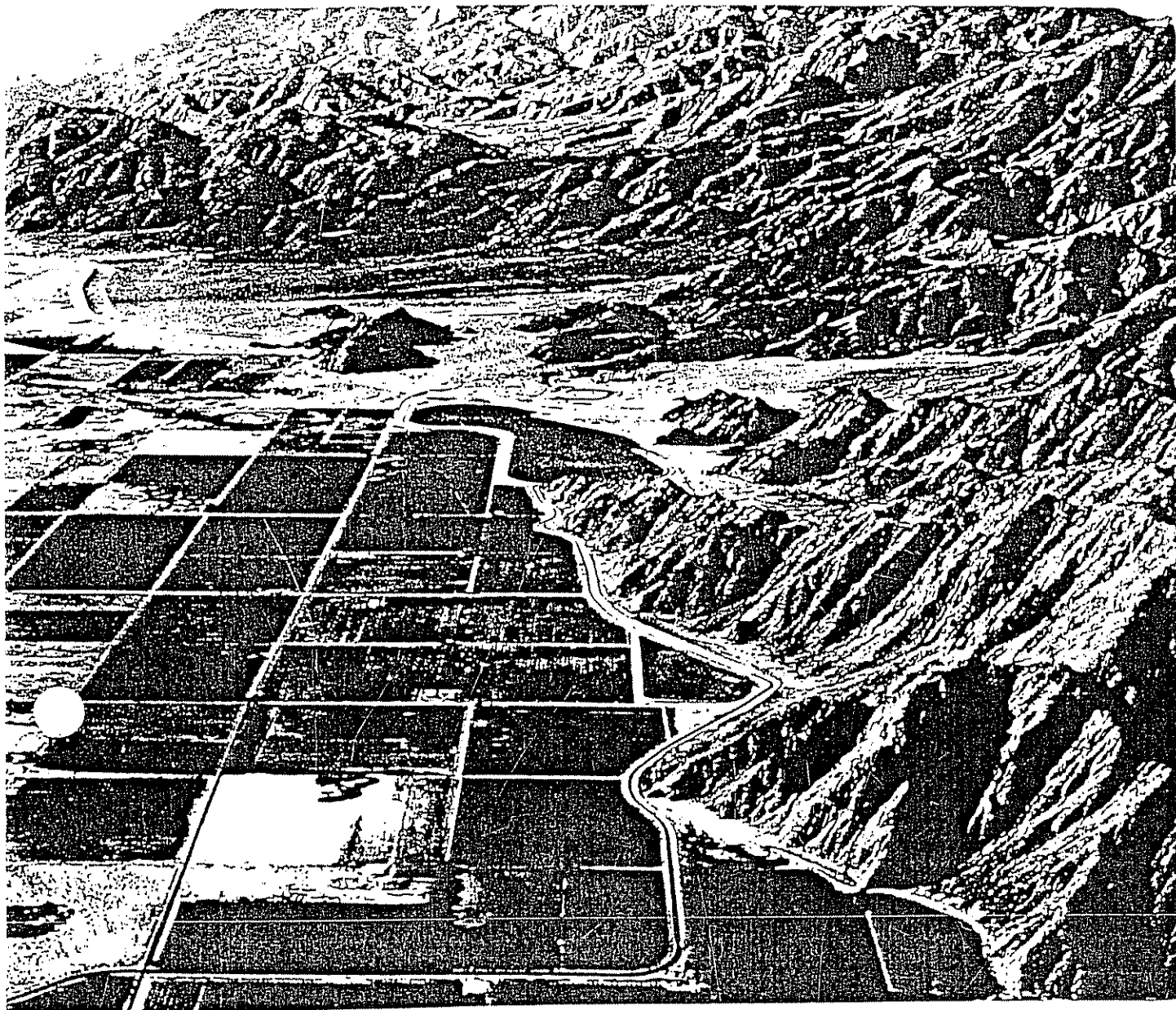
To be ready to contract for indispensable Northern California water under the State Water Plan (only public agencies were qualified to apply), the District in 1961 entered the domestic water field, starting with 1,100 users. The list has grown to 8,214 this year. Under the State Water Plan the District has contracted for 23,100 acre feet annually, and first deliveries are expected within the next two years to supplement the declining ground-water reserves in the upper portion of the valley.

This augmentive supply will insure uninterrupted growth throughout the District's territory for many decades to come. All possible water conservation programs are pursued vigorously.

In 1968 the CVCWD first entered the sanitation field when it acquired the water salvage plant at Palm Desert Country Club along with its domestic water system.

Expansion in this field of service has been rapid and far-reaching. The District is in the midst of providing a central water salvage system for the 3,093-acre Improvement District No. 53 centering on the Eisenhower Medical facility north of Palm Desert. It is contemplated that the treatment plant eventually built to handle this effluent may also serve outfall systems from communities and recreational installations for many miles around.

Too, the District assisted the North Shore Beach, Desert Beach and Bombay Beach communities in starting financing of central water salvage systems for those areas. The plants will be operated by the District when completed.



This aerial view catches within its range three important CVCWD installations, one old, two new. In foreground where Coachella Canal swings into the first cove is the equalizing reservoir built when canal was dug in the 'forties. About one mile beyond is Lake Cahuilla, terminal reservoir of CVCWD under lease to County of Riverside as a park

installation. Between lake and Avenue 66 is the Westside Dike complex, 4½ miles long protecting the lake and farm lands lying along western side of Valley. Rugged precipitous slopes of Santa Rosa Mountains rise sharply from desert floor.

Coachella Valley County Water District  
P O Box 1058, Coachella, Calif 92236

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